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Institute for Home Economics Teachers on Initiating, Developing, and Evaluating Programs at the Post High School Level to Prepare Food Service Supervisors and Assistants to Directors of Child Care Services:  
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The institute was designed to provide information and develop some ability in initiating, developing, and evaluating programs for training workers as food service supervisors in post-high school level programs. Organizational details, student and faculty qualifications, a job description and analysis of the food service supervisor occupation are included in the document. A curriculum designed to prepare individuals for employment in the food service areas in hospitals, homes for the aged, homes for children, hotels, restaurants, schools and industrial cafeterias and other similar operations as food service supervisors and/or managers, lists necessary course work at the junior colleges and area vocational-technical schools. Instructional materials are designed to develop concepts of: (1) supervision of a food service department, (2) nutrition, diets, and menu planning, (3) food purchasing, storage, and handling, (4) food preparation and service, (5) sanitation, safety, and care of facilities, and (6) equipment, records, and reports. They are presented in tabular form, specifying content, experiences, evaluation, and resources. The appendix contains survey and job analysis forms, specifications for facilities and equipment, an equipment list, and a bibliography. Related materials are available as vt 007 682. (FP)

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**FINAL REPORT**

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**The Vocational Educational Act of 1963**

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**Institute for Home Economics Teachers on  
Initiating, Developing and Evaluating Pro-  
grams at the Post High School Level to  
Prepare Food Service Supervisors and  
Assistants to Directors of Child Care  
Services.**

**Volume I**

**A POST-HIGH SCHOOL PROGRAM**

**in**

**FOOD SERVICE SUPERVISION**

**VOCATIONAL EDUCATION IN HOME ECONOMICS**

**Aleene A. Cross, Project Director  
College of Education  
University of Georgia  
Athens, Georgia**

**May 1, 1966 - June 30, 1967**

**U. S. DEPARTMENT OF  
HEALTH, EDUCATION, AND WELFARE**

**Office of Education  
Bureau of Research**

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## FORWARD

This material was prepared in a workshop held at the University of Georgia, July 25 - August 12, 1966, financed through the 4 C funds from the Federal appropriation of 1963 for Vocational Education.

The program outlined in this publication to be offered at the post-high school level, is designed to prepare selected students for employment in food service supervisory positions in such establishments as hospitals, hotels, nursing homes, childrens houses, resturants and industrial and school cafeterias.

Suggestions for two post-high school programs are outlined in this material - one for our Area Vocational Technical school, and the other for a two year program in a Junior or Community College.



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## INTRODUCTION

**Project Title:** An Institute for Home Economics Teachers from Region III and IV, Concerned with Techniques and Procedures for Initiating, Developing, and Evaluating Programs at the Post High School Level to Prepare Food Service Supervisors.

### 1. PURPOSE

The major purpose was to conduct an institute designed to provide information and develop some ability in initiating, developing, and evaluating programs for training workers in selected occupations utilizing Home Economics knowledge and skills. Specifically these programs were for food service supervisors, offered at the post high school level. Materials and instructional aids for this program were a planned outcome. Participants were selected teachers, supervisors, and teacher educators from seven southern states. These states were Alabama, Florida, Georgia, Kentucky, Mississippi, South Carolina, and Tennessee.

Specific objectives of the institute were to:

1. Become acquainted with procedures for initiating occupational education programs.
2. Gain up-to-date knowledge about food service.
3. Develop skill in planning programs at the post high school level in food service.
4. Develop resource materials and suggested instructional aids for use in said programs.
5. Become acquainted with procedures for evaluating occupational education programs and to develop evaluation devices for programs in food service.

### 2. PROCEDURES

The content consisted of three related phases which were: Phase I:

Instruction in procedures for initiating and organizing occupational education

courses, and in up-to-date course content in food service. Phase II: Development of materials and suggested instructional aids for occupational courses for food service workers to be taught at the post high school level. Phase III: Instruction in methods for evaluating occupational education programs and development of devices to be used with food service trainees.

Phase I was intended to meet objectives one and two and utilized the lecture-discussion method, field trip, visual aids, small group work, and reading materials. Content included making a survey of employment needs, organizing and advisory group, job analysis, legal aspects, and equipment, as well as subject matter content in food service.

Phase II was planned to help participants achieve objectives three and four. This phase included a review of all available materials, development of a sequence chart so as to see relationship of all levels of training, determination of total program requirements, development of resource materials, and preparation of instructional aids. Sub-groups of three or four worked on different phases at appropriate times. Competent resource people directed the discussion for determining content outline, served as consultants for small group work, were responsible for quality of content, and for completing materials on schedule.

Phase III was correlated with objective five. The lecture-discussion method and small group work were methods used for this phase.

An outline of content for each day follows:

<u>Phase</u>	<u>Day</u>	<u>Activities</u>
I	Monday July 25	Orientation, discussion of objectives, anticipated outcomes, and schedule for institute. Lecture-discussion on initiating occupational programs including advisory committee, survey of employment opportunities, determination of work experience possibilities, and legal aspects; small group work for listing suggested procedures for each of these.

<u>Phase</u>	<u>Day</u>	<u>Activities</u>
	Tuesday July 26	Lecture-discussion on qualifications of trainees, job analysis, legal aspects, placement of trainees, evaluation and follow-up; and small group work for listing criteria or procedures for each of the above.
	Wednesday July 27	Lecture-discussion on needed competences by consultants from American Dietetics Association and School Lunch Division of the State Department of Education.
	Thursday July 28	Field trips to the University cafeteria, and to hospitals, nursing and convalescent homes in Atlanta to study the competencies needed by these service workers, the conditions under which they work, the problems which need to be met, and the available equipment and facilities.
	Friday July 29	Lecture-discussion on nutrition for individuals with special needs such as people who are ill, older people, and children. Small group work to identify objectives, concepts, and generalizations contained in lectures.
	Monday August 1	Lecture-discussion on management in planning, buying, preparing, and serving food for persons with special needs. Small group work same as Friday.
	Tuesday August 2	Demonstration-lecture-discussion on new developments in quantity food preparation. Small group work same as previous two days.
	Wednesday August 3	Lecture-discussion on facilities and equipment needed for teaching food service management. Small group work same as previous three days.
	Thursday August 4	Lecture-discussion on principles of personnel management and supervision for the food service manager. Small group work same as previous four days.
II	Friday August 5	Review of available materials, identify content for high school program, develop sequence for post high school, outline content for post high school offerings; sub-groups of 3 or 4 begin work on different parts of outline to record objectives, concepts, and generalizations identified in Phase I.
	Monday August 8	Total group react to work done during previous day. Identify experiences for each objective and/or concept, working in sub-groups.



<u>Phase</u>	<u>Day</u>	<u>Activities</u>
	Tuesday August 9	Lecture-demonstration-discussion on developing selected instructional aids; additional work on materials incorporating instructional aids.
	Wednesday August 10	Same as Tuesday.
III	Thursday August 11	Lecture-discussion on evaluating cognitive and affective learning; sub-group work to develop sample test items usable for part of materials developed by sub-group.
	Friday August 12	Lecture-discussion on evaluating skill development; sub-group work to develop appropriate devices and test items; evaluation of institute.

The institute extended over a three week period and met fifteen days. The schedule for each day was from 8:30 a.m. to 4:30 p.m. with morning and afternoon breaks as well as an hour for lunch.

### 3. SELECTION OF PARTICIPANTS

The workshop was planned for fifteen participants with two or three per state. The participants from each state were selected by the State Supervisor and her staff. Preference was given to a team which consisted of two teachers and a supervisor, or a teacher educator from each state. A state was permitted to send only one person if it was impossible to send more. The supervisor or teacher educator had or expects to have responsibility for supervision or in-service education of occupational education programs.

The criteria for selection of teachers were:

1. Is or anticipates teaching food service in a post high school program.
2. Has a master's degree in institutional foods, or is currently working toward such a degree.
3. Agrees to investigate employment opportunities prior to the institute.
4. Agrees to interview appropriate persons, at least 3, in her state to determine the requirements of the job as a food service supervisor.

**The participants included:**

**Mrs. Carolyn Brown**  
Assistant State Supervisor  
State Department of Education  
Montgomery, Alabama

**Mrs. Martha Burns**  
Home Economics Supervisor  
Richmond County Schools  
3112 Lake Forest Drive  
Augusta, Georgia

**Mrs. Dorothy Carty**  
Teacher of Home Economics  
Box 426  
Walhalla, South Carolina

**Mrs. Ora Mae Cheaney**  
College Instructor  
334 E. Main  
Frankfort, Kentucky

**Mrs. Marion B. Conaway**  
D. C. Public Schools  
35th and R Streets, N. W.  
Washington, D. C.

**Mrs. Margaret Crockett**  
Assistant State Supervisor  
205 Cordell Hull Building  
Nashville, Tennessee

**Mrs. Kathryn Everette**  
Teacher of Home Economics  
3027 Arizona Avenue, N. W.  
Washington, D. C.

**Mrs. Dorothy D. Gray**  
State Department of Education  
Route 3, Box 84  
Mt. Olive, Mississippi

**Mrs. Myraline Hicks**  
Home Economics Teacher  
2909 Kennedy Street  
Columbia, South Carolina

**Mrs. Odell Lakeman**  
Home Economics Teacher  
2405 15th Avenue  
Haleyville, Alabama

**Mrs. Evelyn McDonald**  
Broward County Board of Education  
Ft. Lauderdale, Florida

**Mrs. Mary Moulton**  
Okaloosa-Walton Junior College  
Valparaiso, Florida

**Mrs. Nettie Vaught**  
Teacher of Home Economics  
Lascassas, Tennessee

**Miss Elizabeth Waldrop**  
Teacher of Home Economics  
501 East 20th Street  
Jasper, Alabama

**Mrs. Mary Wilson**  
Richmond Area Vocational School  
Augusta, Georgia



#### 4. CONSULTANTS

The full-time staff persons were:

Dr. Aleene A. Cross  
Professor of Education  
203 Baldwin Hall  
Athens, Georgia

Miss Ata Lee  
Regional Representative for Home  
Economics  
Office of Education  
50 7th Street, N. W.  
Atlanta, Georgia

The consultants were:

Mrs. Mildred Barry,  
Regional Chronic Diseases Nutrition  
Consultant  
Department of Health, Education and  
Welfare  
50 7th Street, N. E.  
Atlanta, Georgia

Mrs. Joan J. Coleman  
Consultant, Institutional Administration  
Dumas, Texas

Mr. Garnet H. Deltart  
General Engineering  
Sanitation Service  
Georgia Department of Public Health  
Atlanta, Georgia

Mrs. Helen Jenkins  
Director of Food Service  
Emory University  
Emory University Georgia

Miss F. Louise Kellar  
Occupational Employment Program  
State Department of Education  
Columbia, South Carolina

Miss Josephine Martin  
State Director of Food Service  
State Department of Education  
Atlanta, Georgia

Mr. Thomas H. Powers  
Director of Management Program  
Morris Brown College  
Atlanta, Georgia

Mr. George Ramey  
Director of Food Service Administration  
Erie County Technical Institute  
Main Street- Young's Road  
Buffalo, New York

Mr. William R. Rosselle, Food  
Service Equipment Consultant  
2634 Briar Lake Road, N. E.  
Atlanta, Georgia

Miss Mary Towne, Dietician  
St. Mary's Hospital  
Athens, Georgia

#### 5. FACILITIES

The Center for Continuing Education provided space for the institute which included one large meeting room and several small rooms. Hotel rooms in the

Center were used by the participants. The Center provided a conference coordinator, services of a librarian, audio-visual equipment, a typist, and production of a brief conference report.

The books and materials in the University of Georgia Library were made available and were obtained by the librarian at the Center for Continuing Education.

#### 6. EVALUATION OF CURRICULUM MATERIALS

The first evaluation ran concurrently with the development of the material. Each small work group reported back to the total group. The work material were also evaluated by the instructors and those consultants who were available.

The second evaluation took place after the materials had been used for a year. Half of the group returned for a three day work session. Extension revision of the materials were done at that time.

#### 7. SELF-EVALUATION OF INSTITUTE PARTICIPANTS

Two checklists were used at the beginning and end of the workshop. These were "What Do I Know About Initiating Occupational Home Economics Programs?" and "What Do I Know About Food Service Programs?" Copies of the thecklists are on the next two pages. The following chart indicates the change expressed by the group.

PERCENT OF TOTAL RESPONSES

Time	Occupational Program			Food Service Program		
	much	same	little	much	same	little
Beginning of Institute	5.9	55.4	48.7	6.0	51.8	42.2
End of Institute	63.4	31.3	5.3	78.6	17.2	4.2

Name \_\_\_\_\_

### CHECK LIST

#### WHAT DO I KNOW ABOUT INITIATING OCCUPATIONAL HOME ECONOMICS PROGRAMS

Directions: Check the column that best describes your present knowledge of each of these items.

1. Procedure for initiating a program
2. Types of programs that can be offered
3. Selecting an advisory committee
4. Purposes of an advisory committee
5. Techniques of working with an advisory committee
6. Determining employment opportunities
7. Making an occupational survey
8. Doing a job analysis
9. Selecting teachers for occupational programs
10. Determining personnel and agencies to work with
11. Determining qualifications of trainees
12. Planning general education needed
13. Planning content of Home Economics course
14. Securing desirable centers for work experience
15. Scheduling work experiences
16. Planning for visiting during work experience
17. Working cooperatively with employers
18. Evaluating trainee's effectiveness on job
19. Evaluating knowledge gained in classes
20. Conducting follow-up study of employment

I know		
Much	Some	Little

## CHECK LIST

### WHAT DO I KNOW ABOUT FOOD SERVICE PROGRAMS

**Directions:** Check the column that best describes your present knowledge of each of the items listed below.

Item	I know		
	Much	Some	Little
1. Responsibilities of the Food Service Supervisor			
2. Levels of supervision			
3. Management of a food service unit			
4. Personnel management			
5. Facilities for food service			
6. Purchasing of equipment			
7. Role of the public health service			
8. Food sanitation			
9. Cleaning and dishwashing			
10. Budgeting			
11. Accounting and reporting			
12. Cost control			
13. Use and care of equipment			
14. Menu planning			
15. Standardization of recipes			
16. Simple modified diets			
17. Buying food supplies in quantity			
18. Receiving and storing supplies			
19. Preparation of food in quantity			
20. Service of food			
21. Merchandising of food			

## 8. COMMITMENTS FOR THE FUTURE

Each participant made a personal commitment for 1966-67 and 1967-68. Each state team made a similar commitment.

Each of the eight assistant state or county supervisors and seven teachers committed herself to initiate a program to prepare food service supervisors within the next two years. Each of the supervisors and one college teacher said she would report to the state staff. Three supervisors and one teacher promised to interpret the program to other people.

The commitments made by the teams from each state are given below. A follow-up of these commitments revealed that every state had and were in the process of obtaining most of the aims they had established for themselves.

### Alabama

Help to initiate and develop occupational home economics programs in some of the State Vocational Technical Schools and Junior Colleges.

Interpret the program of Occupational Home Economics at the post high school level to vocational and other teachers, administrators, lay people, and high school students.

Identify the qualifications needed by the post high occupational home economics teacher and investigate possibilities of offering special courses to meet needs.

Improve post high school programs which have been established.

Explore possibilities for expansion of post high school Occupational Home Economics programs and evaluate these possibilities.

Interpret and evaluate the program.



### District of Columbia

Initiate a program Home Economics for the 13th and 14th year:

1. General and occupational advisory committees.
2. Survey of needs and opportunities for employment in food service.
3. Secure personnel to plan programs and write curriculum.
4. Equip and establish laboratories and classrooms for programs.

### Florida

Make surveys to determine the need for training in the areas of supervised food services.

Initiate training programs in the areas where surveys show a definite need.

Interpret to teachers and administrators the emphasis on Home Economics Occupational Training.

Initiate in-service training of teachers for classes in occupational training.

Evaluate programs in progress.

### Georgia

Appoint a state supervisor for Occupational Education

Establish a state Advisory Committee

Interpret occupational education to school personnel

Make a state-wide survey

Carry out an in-service training program for teachers of occupational programs.

Initiate programs in selected Area Vocational Schools.

Report to State Supervisory Staff and Teacher Educators.



### Kentucky

Plan a workshop and invite all persons who may be involved to attend and exchange information received at various workshops that they have attended. Also, make available any publically distributed materials they have developed to this group.

Initiate courses for the Food Service Supervisor.

### Mississippi

Confer with State Director of Vocational and Technical Education, the State Supervisor and assistants of Home Economics, and the State Superintendent of Education to present proposed plan for post-high occupational training program.

Ask State Director of Vocational and Technical Education, State Home Economics Staff, Junior College Administrators and Home Economics personnel to interpret the need and suggested plan for developing a program in the Junior College Curriculum to provide occupational training in the area of Food Service.

Prepare, plan and implement two or more programs in Junior Colleges. One in the area of Food Service.

### South Carolina

Request State Supervisor of Home Economics to plan with Director of Vocational Education for presentation of report to:

- a. State Vocational Staff
- b. Vocational Committee of State Board of Education
- c. Legislative Committee for Junior Colleges
- d. Higher Education Committee
- e. Commission for Technical Education

Have a workshop for Occupational Teachers

Present to Division of General Studeis - University of South Carolina  
for use in their Child Development Program.

Review, use, and evaluate curriculum materials

Present to teacher education staff of Winthrop and South Carolina  
State College

Establish courses in area vocational schools.

Request cooperation of colleges in providing work experience for  
student teachers.

Prepare materials and seek cooperation of ETV in developing teaching  
films.

#### Tennessee

Request facilities to be provided and classes be organized in the area  
of "Food Services" in the area vocational schools.

State classes in "Food Service" in the Community College at Columbia,  
Jackson, and Cleveland that facilities be provided.

#### 9. RECOMMENDATIONS

1. That teachers already employed in occupational programs be given  
top priority.

2. That selection criteria be strickly adhered to and that the final  
selection be the responsibility of the director of the institute.

3. That participants spend at least a week observing in food service  
centers before coming to the institute.

4. That a subject matter consultant be the co-director or employed for the entire time.

5. That a portion of the time be spent in developing visual materials.

6. That follow-up institute be conducted a year later for the purpose of revising materials.

## TERMS DEFINED

### I. Types of Institutions and Programs

1. Post High School Programs--Training programs for the 13th and 14th years whether in junior college, community college, technical school, or extended high school programs beyond high school graduation.
2. Associate Degree in applied Science (A.A.S.) or in applied art (A.A.) may be awarded by colleges upon completion of a prescribed two-year course.
3. Community College--A college serving many purposes in a community. It may provide curricula of less than baccalaureate degree, or the full four-year degree program. It may also provide "terminal" programs in many fields, or adult education for personal, cultural or recreational growth.
4. Extension Programs--Courses or workshops taught by college or technical personnel to community centers or by correspondence to operate competencies or enrichment and/or credit toward an advanced degree.
5. Junior College--A two-year college, public or private, awarding associate degrees. Curricula may be planned for transfer to credits to a four-year college, or for specialized terminal programs.
6. Vocational Technical Schools or Institutes--A school providing training for management or supervisory occupations at the semi-professional level. This school may or may not award degrees or certificates.

### II. Food Service Supervision.

1. Professional--Food Service Director (or administrator) is a professional who plans, organizes, and directs the overall operations of a food service establishment.
2. Semi-professional--The larger the establishment, the more numerous are the sub-levels of supervisory responsibility known as managers or supervisors.
  - (1) Food Service Manager--one who uses formal authority over subordinates who perform activities or produce a product or service.

- (2) Food Service Supervisor--one who trains and supervises employees engaged in preparing and serving food in hospital, nursing home, school or college food service department and similar institutions, or commercial food services; and in maintaining cleanliness of food service areas and equipment. Instructs workers in methods of performing duties and assigns and coordinates work of employees to promote efficiency of operations.
- (3) Dietary Aide--assists the Dietitian or supplements her work in supervising menus, preparations of food, serving meals, planning and serving therapeutic diets in a hospital, nursing home, or similar institution. The aide may work under a visiting or consulting dietitian when there is none in resident employment.
- (4) Cook Manager--one who is responsible for daily operation of a limited service establishment such as a school lunchroom.
- (5) Training Supervisor--one in charge of training food service employees for an institution or large organization.
- (6) Other types of Supervisors:
  - a. Catering
  - b. Counter line
  - c. Dishroom
  - d. Food analysis or research
  - e. Food inspection
  - f. Forelady or foreman in processing plants
  - g. Housekeeping
  - h. Menu planning
  - i. Purchasing
  - j. Records and personnel
  - k. Specialty supervisors are over each department of a large establishment: i.e. salads, desserts, vegetables, etc.
  - l. Storeroom or stockroom

\* Source- Dictionary of Occupational Titles, 1965, Volume I. Definitions of Titles, Third Edition, U. S. Department of Labor.



## ORGANIZATION OF PROGRAM

### Surveys

Before establishing a program to prepare people for food service occupations the opportunities for employment must be determined. Appropriate personnel from the public school system aided by the state and local employment service often take this responsibility. In some states members of the state home economics supervisory staff aided by local home economics teachers have conducted surveys of employment opportunities. Members of an Advisory Committee for Food Services may be helpful. Since this committee is usually composed of persons who are successful in the occupation and have contacts with operators of different types of food service establishments, they would be helpful in gathering information. Forms have been prepared by states for this purpose. (See example in Appendix A)

Personal interviews with prospective employers are more desirable than merely distributing all filling in forms. The personal contact gives certain information valuable in establishing a program which cannot be obtained on a form that has been distributed. Such information as attitudes of employers, standards of the establishment, possibilities for student work experience under desirable conditions and wages, and fringe benefits possible for employers are all important considerations in personal interviews. Possible instructors are often discovered when making surveys.



### Advisory Committee

The national and state Vocational Education officials have set up advisory committees to help in the over-all planning of programs. It is their recommendation that local advisory committees be organized to assist in the planning of programs in the local level. A carefully chosen representative committee is most important and should be used by all coordinators of wage-earning programs. It will give her a group of interested people to whom she may go for support and advice.

#### A. Purposes and duties

1. Recruit students
2. Help plan the program based on the needs of the occupation for which the student is being trained.
3. Suggest equipment and facilities needed for training
4. Act as public relations person
5. Help keep curriculum up to date and plan for growth and expansion
6. Give advice and encouragement to students
7. Assist in securing permanent jobs for students
8. Help evaluate the program

#### B. Suggested types of personnel would vary depending upon location of the community.

1. Local employment office representative
2. Employers of Food Service managers
3. School officials
4. Health and Welfare representatives
5. Member of American Dietitive Associations
6. Member of American Home Economics Association

## FACULTY QUALIFICATIONS

### Education

Faculty members employed to teach courses in Food Service Supervision should meet the standards for certification within the state. Minimum requirements would be a B.S. degree in Home Economics Education with additional credits in Foods and Nutrition or Institutional Management, or a B.S. degree in Foods and Nutrition or Institutional Management with teacher certification. Junior College standards usually require teachers to have a masters degree.

### Experience

Experiences in institutional or commercial food establishments are highly desirable, plus teaching experience at the high school or college level.

## STUDENT QUALIFICATIONS

### I. Educational Qualifications

Must meet all the requirements for admission to the school in which enrolled including:

#### A. Junior Colleges

High school diploma or high school equivalency diploma

#### B. Vocational-Technical Schools

High School diploma or high school equivalency diploma

Consideration may be given to those with abilitys

### II. General Qualifications of Students

#### A. Interest in Food Service

Has a real interest in the preparation and service of quality food

#### B. Health of Individual

Shows evidence that he is physically qualified and emotionally stable to meet the requirements of a food service supervisor. Health cords prom Board of Health

**C. Potential Leadership Ability**

Leadership ability should be determined from the results of educational testing services, recommendations of school and community leaders and or recommendations of previous employers.

**D. Personal Traits to be considered-(These may be evaluated through personal interviews, aptitude tests, and recommendations.)**

**Dependability**

Promptness, sincerity, consistency, ability to work without supervision, integrity, and follows instructions

**Cultural Refinement**

Courtesy, consideration, appreciation, manners, and respect

**Leadership**

Forcefulness, imagination, judgement, resourcefulness, ability to inspire others to act, and willingness to accept responsibility

**Industry**

Persistence, habits of work, and use of time

**Mental alertness**

Attentiveness, interest, eagerness to learn, and memory

**Thoroughness**

Accuracy, sustained interest, completion of work, and carefulness

**Personal Appearance and Grooming**

Cleanliness, unoffensiveness, appearance, orderliness, and poise

**Ability to Get Along with Others**

Adaptability, friendliness, tact, cooperation, willingness to be counseled, respect for others, sense of humor, and interest in people

**Social Habits**

Attitude, self-control, and honesty

**SIZE OF CLASSES**

It is recommended that the size of the group be limited in order that they may receive adequate supervision and to develop the necessary skills to prepare

them for employment following their completion of the program. The class size may vary from 10 to 20 depending on facilities. The students may be divided into smaller groups for laboratory experience.

## JOB DESCRIPTION FOR FOOD SERVICE SUPERVISORS

The following job description explains the duties and responsibilities of a food service supervisor, as described in the Dictionary of Occupational Titles\* for those employed in hotels, restaurants and institutions. The D.O.T. number for a food service supervisor is 319.138.

- Trains and supervises employees engaged in serving food in hospitals, nursing homes, school or college food service departments, and similar institutions

- Maintains cleanliness of food service areas and equipment

- Instructs workers in methods of performing duties and assigns and coordinates work of employees to promote efficiency of operations

- Supervises serving of meals in dining room

- Oversees cleaning of kitchen utensils and equipment, according to sanitary standards

- Keeps records, such as amount and cost of meals served and hours worked by employees

- Requisitions supplies and equipment to maintain stock levels

- May direct preparation of foods and beverages

- May assist Dietitian Therapeutic (profess. & kin.) in planning menus

- May interview and select new employees

- May supervise Tray-line Workers and be designated Tray-line Supervisor

\*Source - Dictionary of Occupational Titles, 1965, Volume I, Definitions of Titles, Third Edition, U. S. Department of Labor.



## JOB ANALYSIS OF A FOOD SERVICE SUPERVISOR

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**WHAT A SUPERVISOR SHOULD  
BE ABLE TO DO**

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**WHAT A SUPERVISOR SHOULD  
KNOW**

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### SUPERVISION OF FOOD SERVICE DEPARTMENTS

Supervise all food service employees  
in the food service department

Supervise and work with others in  
an ethical manner

Orient, train, supervise and evaluate  
employees

Assign and coordinate work and time  
schedule of employees to promote  
efficiency of operations

Visit residents of institutions to  
improve the acceptance of food

Explain the purpose and objectives  
of the food service department

• Duties and responsibilities of all  
food service employees as well  
as those of the food service super-  
visor

• Levels and functions of management  
in the food service department

• Personal and ethical qualities and  
practices

• Techniques of giving instruction  
and direction

• Use of judgement in working with  
others

• Methods of motivating employees

• Functions of communicating clearly  
with others

• Organization and development of a  
plan of work

• Development of work and time  
schedules

• Basic psychology of human behavior

• The place of the food service depart-  
ment in the total organization or  
establishment



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**WHAT A SUPERVISOR SHOULD BE  
ABLE TO DO**

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**WHAT A SUPERVISOR SHOULD KNOW**

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**NUTRITION, MENUS AND DIETS**

Apply nutritional requirements to meet  
the needs of the body

Plan nutritious meals

- Composition and function of foods
- Basic food requirements of the body  
and their use in planning normal diets.
- Modification of diets and their effect  
on the body
- Words and definitions for menu plan-  
ning
- Principles of menu planning for  
institutions and commercial food  
service units

**EQUIPMENT**

Select equipment for the food service  
unit

Instruct employees in use, care and  
safe operation of the equipment

- Factors to consider in writing  
specifications for the selection of  
equipment
- Operation and safety precautions for  
all food service equipment
- Care, cleaning and maintenance of  
food service equipment

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WHAT A SUPERVISOR SHOULD BE  
ABLE TO DO

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WHAT A SUPERVISOR SHOULD KNOW

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FOOD PURCHASING

Make purchase orders using specifications that are guides for purchasing food

Select quality of food in relationship to use

- Steps to follow when purchasing food
- Use of buying guides for purchasing food
- Preparation of requisitions and methods for keeping production records
- Quality, size and grades of food products

STORAGE AND HANDLING

Maintain correct storage temperatures in refrigerators, freezers, and all storage areas

Maintain a continuous flow of food from storage area to preparation work stations

Maintain an orderly storeroom

- Principles of storage for all types of food
- Use of storage areas in a food service unit
- Work simplification methods
- Time and motion studies for work simplification
- Food storage procedures

FOOD PREPARATION

Supervise the production of food in each of the work areas

- Use of recipes for standardized products
- Portion control
- Cost control of recipes
- Principles, methods, and techniques of food preparation for:

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**WHAT A SUPERVISOR SHOULD BE  
ABLE TO DO**

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**WHAT A SUPERVISOR SHOULD KNOW**

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**FOOD PREPARATION (cont'd)**

Appetizers  
Beverages  
Protein cookery  
Vegetables and fruits  
Sandwiches, salads, salad  
dressings  
Fats  
Cereal  
Bakery products

• Convenience foods

**SERVING OF FOOD**

Follow and use acceptable procedures  
in serving foods

Supervise the setting up and serving  
of attractive trays

Adjust servings of food to individual  
preferences and diets

Display and merchandise foods in an  
attractive manner

Supervise all clean-up operations

Evaluate the food service operation

• Types of food service operations  
Tray service  
Table service  
Buffet service  
Cafeteria service  
Catering service  
Vending machine service

• Methods for displaying foods to make  
them appealing to others

• Methods to evaluate the acceptance  
of food served

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WHAT A SUPERVISOR SHOULD BE  
ABLE TO DO

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WHAT A SUPERVISOR SHOULD KNOW

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SANITATION, SAFETY, AND CARE OF FACILITIES

Maintain high standards of physical  
fitness and personal hygiene  
    General appearance  
    Health and medical check-ups

Maintain high standards of  
cleanliness  
    Ability to see the cleaning  
    schedules are followed as planned  
  
    Supervising cleanliness in all  
    work areas

Conduct routine inspection  
    Insect and rodent control  
    Food tasting  
    Techniques for handling food with  
    correct utensils which are provided

Refrigerate and store food

Instruct, follow-up and evaluate safety  
practices

Prevent accidents

Apply first aid to minor injury

Maintain floors, walls, equipment, work  
surfaces, furnishings, etc.

• Principles of health and personal  
hygiene  
    Health habits  
    Nutritional needs of the body

• Principles of sanitation

• Local and State sanitation laws  
Techniques for controlling food  
contamination and growth of bacteria

• Factors contributing to food spoilage

• Precautions in preventing accidents in  
food service areas

• Hazards, precautions and general safety  
procedures

• Safety practices to prevent: Strains,  
cuts, splints, burns, falls

• First aid procedures

• Principles of housekeeping  
Effects of cleaners upon surfaces  
and materials  
    Procedures  
    Cleaning compounds  
    Precautions in cleaning

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**WHAT A SUPERVISOR SHOULD BE  
ABLE TO DO**

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**WHAT A SUPERVISOR SHOULD KNOW**

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**RECORDS AND REPORTS**

**Make periodic reports**

**Make purchase orders and requisitions**

**Maintain inventory records**

**Make, use and keep production records  
and portion costs**

**Calculate cost of recipes**

**Classify and keep a record of other  
expenses**

**Calculate food wastes**

**• Accounting and purchasing procedures  
and policies**

**• Procedures for making various types  
of food service reports**

**• Purchase orders and receiving records**

**• Portion control and costing recipes**



## PROPOSED CURRICULUM FOR PREPARING FOOD SERVICE SUPERVISORS

This curriculum is designed to prepare individuals for employment in the food service areas in hospitals, homes for the aged, homes for children, hotels, restaurants, school and industrial cafeterias and other similar operations as Food Service Supervisors and/or Managers.

The curriculum could be offered in different types of schools depending on the state and its policies. Some suggestions for types of schools and curriculum which might be offered are as follows:

### A. JUNIOR COLLEGE OR COMMUNITY COLLEGE

Requirements for admission to this course would be a high school diploma or its equivalent, plus meeting all entrance requirements for the specific Junior College Program. The curriculum would consist of two academic years of study with the granting of an Associate of Applied Science Degree in Food Service Supervision (A.A.S.)

JUNIOR COLLEGE- GENERAL EDUCATION COURSES	Suggested Quarter Hours of Course Credit
Biological Science and Physical Science	
General Chemistry .....	5
Applied Science for Food Service Supervision .....	5
Health (and Physical Education) .....	3
Applied Mathematics .....	<u>3</u>
	16

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**JUNIOR COLLEGE-  
GENERAL EDUCATION COURSES**

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Suggested Quarter  
Hours of Course Credit

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**Social Studies**

Introduction to Sociology .....	3
Contemporary Sociology .....	3
Psychology .....	5
Economics .....	<u>3</u>
	14

**Humanities**

Communication Skills .....	10
Speech .....	3
Orientation to the Food Service Industry .....	1
Nutrition .....	5
Quantity Food Service Equipment .....	5
Food Service Layout and Interiors .....	3
Menu Planning .....	3
Modified Diets .....	3
Storage and Handling .....	3
Purchasing and Food Cost Control .....	5
Record Keeping .....	3
Supervising Food Service Operations .....	5
Sanitation, Safety and Care of Facilities .....	3
Demonstration Techniques .....	3
Food Preparation Techniques and Service .....	5
Catering and Special Food Service .....	3
Quantity Food Preparation .....	<u>10</u>
	60

**SUGGESTED CURRICULUM FOR A TWO YEAR TERMINAL  
JUNIOR COLLEGE PROGRAM**

**FIRST YEAR**

Communication skills .....	10
Introduction to Sociology .....	3
Orientation of Food Service Industry .....	1
General Chemistry.....	5
Health and/or Physical Education .....	3
Applied Mathematics .....	3
Sanitation, Safety and Care of Facilities .....	3
Basic Foods and Nutrition.....	5
Menu Planning .....	3

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**JUNIOR COLLEGE-  
GENERAL EDUCATION COURSES**

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**Suggested Quarter  
Hours of Course Credit**

**Social Studies**

Introduction to Sociology .....	3
Contemporary Sociology .....	3
Psychology .....	5
Economics .....	<u>3</u>
	14

**Humanities**

Communication Skills .....	10
Speech .....	3
Orientation to the Food Service Industry .....	1
Nutrition .....	5
Quantity Food Service Equipment .....	5
Food Service Layout and Interiors .....	3
Menu Planning .....	3
Modified Diets .....	3
Storage and Handling .....	3
Purchasing and Food Cost Control .....	5
Record Keeping .....	3
Supervising Food Service Operations .....	5
Sanitation, Safety and Care of Facilities .....	3
Demonstration Techniques .....	3
Food Preparation Techniques and Service .....	5
Catering and Special Food Service .....	3
Quantity Food Preparation .....	<u>10</u>
	60

**SUGGESTED CURRICULUM FOR A TWO YEAR TERMINAL  
JUNIOR COLLEGE PROGRAM**

**FIRST YEAR**

Communication skills .....	10
Introduction to Sociology .....	3
Orientation of Food Service Industry .....	1
General Chemistry.....	5
Health and/or Physical Education .....	3
Applied Mathematics .....	3
Sanitation, Safety and Care of Facilities .....	3
Basic Foods and Nutrition.....	5
Menu Planning .....	3

AREA VOCATIONAL-TECHNICAL SCHOOL- TECHNICAL EDUCATION COURSES	Estimated Class, Labor- atory and/or On-The-Job Training Hours*
Orientation To The Food Service Industry	30
Communication Skills	60
Applied Mathematics and Record Keeping	90
Purchasing and Food Cost Control	90
Storage and Handling	30
Sanitation, Safety, and Care of Facilities	90
Nutrition and Menu Planning	130
Modified Diets	60
Basic Food Preparation	90
Quantity Food Service Equipment, Use and Care	60
Quantity Food Preparation, Service, and Merchandising	230
Catering and Special Food Service	60
Quantity Food Laboratory or On-The-Job Training	300
Supervising Food Service Operations	90
Evaluation	<u>30</u> 1,440

SUGGESTED TOTAL NO. OF HOURS-

\*Training hours were estimated for a 12 months program.

## **SUPERVISION OF FOOD SERVICE DEPARTMENTS**

### **Objective**

- .To become aware of the duties and responsibilities of a food service supervisor.**



## SUPERVISION OF FOOD SERVICE DEPARTMENTS

### Objective:

To become aware of the scope of the duties and responsibilities of a food service supervisor.

Concepts - Content	Experiences	Evaluation	Resources
Responsibilities of the Food Service Supervisor	<p>Interview food service supervisors in the community to ascertain the organizational structure in which they are employed.</p> <p>Obtain and compare organizational charts of several establishments</p> <p>List duties and responsibilities of a Food Service Supervisor</p> <p>Determine the areas of the job that could be identified as supervision</p> <p>Identify the operating activities and the management activities</p>		<p><u>Hospital Food Service Manual</u>, American Hospital Association, 1954. 840 North Lake Shore Drive, Chicago, Illinois, 1954</p> <p><u>School Food Centers</u> George and Heckler 1960, The Ronald Press Co., New York, 1960</p> <p><u>Food Service in Institutions</u> West, Wood, Harger, Fourth Ed., John Wiley and Sons, 1966</p> <p><u>School Food Centers</u>, George, N. L., and Heckler, Ruth D., 1960, The Ronald Press Co., New York, 1960.</p>
Supervision of workers	Identify the duties and responsibilities of each worker in the food service department		<u>Food Service in Institutions</u> , West, Wood, Harger, 1966
Orientation of Workers	<p>Discuss the purpose and importance of an orientation program for a food service worker</p> <p>Plan an orientation program</p>		Bessie B., Levelle, Virginia F. Fourth Edition, Wiley, New York, 1966.

Concepts	Experiences	Evaluation	Resources
Maintenance of Desirable Human Relations	<p>Enumerate and explain personal and leadership qualities that demonstrate effective human relations</p> <p>Describe situations and have members of the class play the role of supervisors showing the effectiveness of human relations between a supervisor and an employee</p>	<p>Self evaluation of personal and leadership qualities through the use of checklist.</p>	<p><u>School Food Centers</u> George and Heckler, 1960</p> <p><u>Food Service in Institutions</u>, West, Wood, Harger, 1966</p>
Training of Workers	<p>Develop several methods of training employees for various skills with an emphasis on work simplifications</p>		<p><u>Food Service Industry</u> Department of Health, Education, Welfare, DE-82007</p>
Evaluation of Performance	<p>Develop performance rating charts for various jobs</p>	<p>Written report to determine information understood</p>	<p><u>Food Service in Institutions</u>, West, Wood, and Harger, 1966</p>

## NUTRITION

### Objectives:

To understand the importance of nutrition, health and preventing diseases.

To understand nutritional needs at all ages.

# Objectives:

## NUTRITION

To understand the importance of nutrition, health and preventing diseases.

To understand nutritional needs at all ages.

Concepts - Content	Experiences	Evaluation	Resources
Nutrition "Yesterday and Today"	<p>List, define nutrition terms</p> <p>Survey history of nutrition</p> <p>Discuss development of food guides, their strength and weaknesses</p> <p>Report on world nutrition projects sponsored by U. S. What were specific contributions?</p>	<p>Tests on Glossary</p> <p>Compare food guides charts</p> <p>Reports, oral and written</p>	<p>U. S. Department of Air Force, <u>Food Service Foundations</u> Department of H.E.W., Public Health Service Washington, D. C.</p> <p>Peyton, <u>Practical Nutrition</u> Fleck and Mumves, <u>Introduction to Nutrition</u>, The MacMillan Co., New York, 1962</p>
World and U. S. Nutrition	<p>Study status of nutrition in U.S. and the world today</p> <p>Study factors affecting nutrition: traditions, customs, cultures, regional lines, nationalities</p>	<p>Reports---oral and/or written</p>	<p>Film: "Digestion I and II," Georgia Dept. of Education, Atlanta, Georgia</p> <p>Basic 7 and Basic 4 Food Charts, National Research Council, New York</p>
Socio-economic Status and Nutrition	<p>Invite persons of different nationalities and cultural background to talk to class</p> <p>Consider additional factors body functions, mental health, remedial defects, (teeth, tonsils, adenoids, etc.) health habits, likes and dislikes, prejudices.</p>		<p><u>Foods</u>, Fourth Ed., Houghton Millin, Boston, 1956, Justin, Rust, &amp; Vail</p> <p><u>Foods</u> USDA Yearbook 1959 U.S. Gov't Printing Office, Washington, D. C.</p> <p>Krause, <u>Foods and Nutrition and Diet Therapy</u>, 1961 Saunders Press, Philadelphia, 1961</p>

Concepts - Content	Experiences	Evaluation	Resources
	<p>Collect from TV, Radio, newspapers, magazines, examples of food fads and fallacies</p> <p>Carry out or observe a rat or hamster experiment with controlled diets. Draw conclusions. Show films on diet deficiencies</p> <p>Study signs of good nutrition in individuals:            Height-Weight            Condition of Skin            Hair-Nails            Appetite            Attitude            Posture</p> <p>Study how the proper function of the organs and glands contribute to good nutrition</p> <p>Keep a record of daily food intake for a certain number of days. Include all foods, drinks, snacks and gum. Check findings against dietary forms. Make plans to correct deficiencies.</p>	<p>Evaluate food fads in terms of good nutrition</p> <p>Summary of Experiment</p> <p>Charts and graphs used for comparisons</p>	<p>Georgia Health Dept., Atlanta, Georgia            Film--"Two Little Rats and How they Grew"            "Understanding Vitamins"</p> <p>Pamphlet--"Food Fads and Fadism"</p> <p>Peyton, <u>Practical Nutrition</u></p> <p><u>Food Facts Talk Back</u>            The American Dietetic Association, Chicago, Ill.</p>
Physical Signs of Good Nutrition			
Basic Food Guide			



Concepts - Content	Experiences	Evaluation	Resources
	<p>Identify foods which give a feeling of: Masculinity, femininity, status maturity, status, sociability, religion</p> <p>Survey of foods associated with various holidays</p> <p>Analyze food habits of families-- Check against Daily Food Guides</p> <p>Study essential food nutrients-- Metabolism Digestion Absorption Principal functions Good Sources Deficiencies</p> <p>Discuss nutritive contributions of basic food groups. Compare food values within food group.</p> <p>Study Nutritive needs of the young child daily requirements</p> <p>Study common eating problems of children. Suggestions for solving problems</p>	<p>Reports given to class</p> <p>Reports of Findings</p> <p>Records of Analysis</p> <p>Test</p>	<p>USDA Yearbook 1959, <u>Foods</u> U. S. Government Printing Office, Washington, D. C.</p> <p>Film--"As Children See It" Georgia Center for Continuing Education, Athens, Ga.</p> <p>Martin, Ethel A., <u>Robert's Nutrition Work with Children</u> University of Chicago Press Chicago, Ill, 1954</p>
Nutrients			
Basic Food Groups			
Childhood Nutrition			

Concepts - Content	Experiences	Evaluation	Resources
Adolescent Nutrition	Do's and don'ts for child feeding Developing interest in eating	Observation Check List	Krause, Food Nutrition and Diet Therapy, Saunders Press, Philadelphia, 1961 Fleek, Munves, Introduction to Nutrition, The MacMillan Company, New York, 1962 Burton, The Heinz Handbook of Nutrition, 1959 H.J. Heinz Company Pittsburgh, Penn. National Association of Mental Health, "Eating Problems of Nutrition" Home & Garden Bulletin No. 13 "Food for Families With School Children" Public Affairs Pamphlet "Personality Plus Through Diet" Public Affairs Committee, New York. Bogert, Nutrition and Physical Fitness, Sixth Ed., W.B.Saunders Co., Philadelphia, Penn, 1957 Children, Leverton, "Nutrition in Adolescence" Journal of Home Economics 49:107 '57, American Home Economics Association, 1600 Twentieth St., Wash.
	Observe Child feeding in hospitals, institutions, school lunch nursery schools, and Head Start projects, etc.		
	Discussion nutrition requirements of adolescents	Summary of observations	
Adult Nutrition	Observe adolescent eating habits-- Interview groups. Record eating habits. Check against Nutritional needs		
	Discuss recommended dietary allowances for adults at various age levels.  Review research data on adult age groups--(Young Adults 20-25, adults 25-45, Middle age 45-65 Older persons 65 and older) To better understand the impact of the cultural background, tension strain physiological and psychological changes, and economic status.		

Concepts - Content	Experiences	Evaluation	Resources
Geriatric Nutrition	<p>Contact a number of "Golden Age", senior citizens and other types of clubs or organizations whose members are retired men and women</p> <p>Discuss eating habits and problems with the aged. List suggestions for solving such problems.</p> <p>Establish evidence for the statement that good nutrition will aid in "preservation of youth like qualities"</p> <p>Invite resource persons from State Board of Health to discuss nutrition problems in nursing homes and Home Care Centers</p> <p>Tour Nursing Homes, hospitals to observe feeding facilities for the aged.</p>	<p>Written and oral reports on discussion</p>	<p>Leverton, Ruth M., <u>Food Becomes You</u> (Paperback 95¢, Doubleday Co., 1960)</p> <p>USD of HEW Public Health Services For <u>Nursing Homes and Homes for the Aged--A Guide to Nutrition and Food Services</u>, U. S. Gov't Printing Office, Washington</p> <p>Krause, Food, <u>Nutrition &amp; Diet Therapy</u>, Saunders Press, Philadelphia, 1961</p> <p>Fleek and Munves, <u>Introduction to Nutrition</u>, The MacMillan Company</p> <p>Bogert, <u>Nutrition and Physical Fitness</u>, W.B. Saunders Co., Philadelphia</p> <p><u>Magazines Volume Feeding Management</u>, New York</p> <p>Merchandising Journal of The Food Service Industry--<u>Food Service Magazine</u></p> <p>Hospital and School Feeding Magazine, June 1964--<u>School and College Feeding</u></p>

Concepts - Content	Experiences	Evaluation	Resources
Pregnancy and Lactation	<p>Visit nursing homes and home care centers to observe older people</p> <p>Discuss nutrition during pregnancy and lactation preconception stage total health of fetus and mother Nutrients needed recommended allowances</p>	Written reports on observations	<p>May 1964, Vol. 2, No. 5 <u>Hospital Nursing Home</u></p> <p><u>ADA</u></p> <p>Hovwitt, "Dietary Requirements of the Aged" 29:443 1953</p> <p>Boeuwkes, "<u>Study Food Habits of the Elderly</u>" Vol. 37:215-196</p> <p>Home and Garden Bulletin No. 17 U.S. Government Printing Office "Food Guide for Older Folks" Washington</p> <p>Leverton "Food Becomes You" 1961, Iowa State University Press, Ames, Iowa, 1965</p> <p>Taylor "Foundations of Nutrition", The MacMillan Company, New York, 1955</p> <p>Burton, <u>The Heinz Handbook of Nutrition</u>, H.J. Heinz Co., Pittsburgh, Penn.</p> <p>Pollack--<u>All Those Myths about Pregnancy</u></p>

Concepts - Content	Experiences	Evaluation	Resources
<p>Food Fads and Fallacies</p>	<p>Make a collection of food fads and fallacies, prejudices pregnant women hold or have held during pregnancies and lactation. Evaluate in terms of scientific basic and facts.</p>	<p>Bulletin board on food fads and fallacies from news print and magazines, TV and radio, personal interviews.</p>	



## MENU PLANNING

### Objective:

To develop an understanding of the principles of menu planning considering Nutrition, acceptability, and cost.

## MENU PLANNING

Objective: To develop an understanding of the principles of menu planning considering nutrition, acceptability, and cost.

Concepts - Content	Experiences	Evaluation	Resources
Principles of Menu Planning			
Characteristics of a good meal	Discuss favorite foods and favorite meals	Determine what makes certain foods or combinations popular	Justin, Rust, and Vail, <u>Foods</u> , Fourth Edition, Houghton Mifflin, Boston, 1956
Consider the needs of guests	List various groups usually served		Fowler, West, and Shugart, <u>Food for Fifty</u> , Fourth Edition Wiley, New York, 1961
	Describe food needs and preference of several groups children teenagers working man elderly		Culinary Institute of American, <u>The Professional Chef Institutions Magazine</u> 1963, 1801 Prairie Avenue, Chicago
Nutritional needs	Review Basic 4, adapt to various age groups and to economics levels	Check day's food against Basic 4 lists	Walsh, <u>Food and Nutrition for Institutions</u> The Welfare Federation of Cleveland, Cleveland, Ohio, 1963
Consider the establishment	Plan menu to be served at school lunch: List equipment needed Determine costs Make market list Purchase foods Prepare meals Determine costs for meal--for portions sale price	Compare real costs, preparation, plans, etc. with preliminary plans.	"The Menu: Your Guide to Buying" <u>Volume Feeding Management</u> , April 1965 New York
Type of service Number to be served Equipment available Employees Availability of foods Budget Purchasing Costs--Sales			

Concepts - Content	Experiences	Evaluation	Resources
Procedures for Menu Planning	Collect menu planning books, guides, recipe files, cost charts and other needed supplies into a menu planning center. If such a center already exists, catalog its contents for ready reference.	Written test or term meanings.	All Books Listed herein and other desired
Planning Center			Kotschevar-- <u>Quantity Food Purchasing</u> , Wiley, New York, 1961
Definitions of menu-planning terms	Examine sample menu cards from several restaurants and identify recurring and/or unfamiliar terms and words. Consult glossories, cook-books to determine meanings of new terms. Read recipes to relate terms to ingredients or preparation processes. Prepare one food in various ways to illustrate meanings of terms. Prepare various foods in one way to illustrate similarities and differences.	Menus conform to the Basic 4. An acceptable score of standard on check sheet and score meals for Palatability Appearance Quality Service Total acceptability	Treat and Richards, <u>Quantity Cookery</u> , Little Brown and Company, Boston, 1951
Steps in Planning Appetizers Meat or entree Vegetables Salads Breads Desserts Beverages	Plan menus for 1 week for an institution or commercial establishment, following these steps:		U.S.H.E.W.-- <u>A Guide For Nutrition and Food Service</u> , U.S.Gov't Printing Office, Washington, D. C.  Fowler, West, and Shugart, <u>Food Planning for Fifty</u> Fourth Edition, Wiley New York  Cronan: <u>The School Lunch</u> Charles A. Bennett Co., Peoria, Illinois, 1962  U.S.D.A. <u>Food Buying Guide for Type A Lunches</u> , U.S. Printing Office, Washington, D.C.

Concepts - Content	Experiences	Evaluation	Resources
Recording the menu	Study several types of menu forms, develop one to meet the needs of the group. Record menus using these forms.		
Cycle Menus	Plan a 3 week cycle menu for a school cafeteria, hospital, nursing home or other institution. Visit typical establishments. Observe operation. Study menus.		
Menu Plans for Special Occasions Banquets Teas Receptions Open House	Plan, prepare, and serve a meal for one of these occasions. Figure costs per person for preparation. Establish selling costs of meal.	Compare written plans, with actual results. Oral reports on acceptability operation, decorations, etc.	<u>The Professional Chef</u>  Fowler, West, and Shugart, Food for <u>Fifty</u> , Fourth Edition, Wiley and Sons New York, 1967
Catering single occasion contract service	Study all factors involved in catering operation. Visit a catering service if available---or have one come as a speaker		
Left overs are profit or loss	Study recipes to determine ways of utilizing various kinds of left overs---Prepare several foods of varying kinds		

## **DIETS**

### **Objectives:**

Understanding of how the adequate diet can be modified to prevent and treat diseases.



## DIETS

**Objective:** A knowledge of how the nutritionally adequate diet can be modified to prevent and treat diseases.

Concepts - Content	Experiences	Evaluation	Resources
Basic Daily Food Requirements of the Body	Emphasize the use of Basic Four in planning normal diets. Illustrate with visual aids.	Test	<u>Handbook of Diet Therapy</u> -- D. Turner
Normal Diets	Discuss basic normal diets. Plan basic normal diets	Evaluate basic normal diets.	Film Strip "Food for Life" State Dept. of Education, Atlanta, Ga.
Modified Diets High Calorie	Plan from normal diets to increase normal calorie intake	Weight Charts	"Diet and Menu Guide", American Hospital Associa- tions, 840 North Lake Shore Drive, Chicago, 1954
Low Calorie	Plan from normal diets such reduction diets as 1000 and 1500 calories		<u>Food for Fifty</u> , Fowler, West Shuggart, Fourth Edition, Wiley & Sons, New York, 1967
Pregnancy Lactation Salt free Bland Soft Liquid High Protein High Vitamin Low Residue Diabetic	Study low calorie diets for other physical conditions  Use Calorie tables to determine calories for diets  Study the need or reason for these modified diets  Study and compare examples of modified diets in relation to normal diets  Demonstrate with food trays how the normal diet can be modified.		<u>Food, Nutrition, and Diet Therapy</u> , Krause, Marie V., Saunders Press, Philadelphia  <u>Practical Nutrition</u> , Peyton, Alice B., J.B. Lippincott Co., Philadelphia, 1962

## **EQUIPMENT**

### **Objectives:**

- To develop the ability to select equipment and to write specifications**
- To understand the importance of safety in the operation of food service equipment.**
- To develop an understanding and skill in the use, care and safe operation of equipment.**
- To develop the ability to operate and maintain service equipment**
- To study and understand the proper use and care of storage equipment**

Objective: To develop the ability to select equipment and to write specifications

Concepts - Content	Experiences	Evaluation	Resources
Selection of equipment	Discuss pre-planning considerations	Quiz	Sec. I, Establish the Needs of the Institution
Establish needs	Study principles of commercial layouts.		Kotschevar and Terrell <u>Food Service Layout and Equipment Planning</u> , Wiley and Sons, New York, 1961.
Principles of layout	Analyze a blue print for understanding of symbols and principles involved.		Cronan, <u>The School Lunch</u> , Charles A. Bennett Co., Inc., Peoria, Illinois, 1962
Guidelines for Selection	Student Project: Plan the layout of a commercial kitchen to incorporate the principles involved		Architect
	Consider guidelines for the selection of equipment		Dukas, Pettery and Lundberg, D., <u>How to Operate a Restaurant</u> , New York, 1962 Ahern Publishing Co.
	Choose a specific item and list considerations for its selection		II Equipment and Facilities to Fill the Needs
Specifications	Study a well-prepared specification of a simple piece of equipment.	Quiz	Kotschevar and Terrell <u>Food Service Planning</u> , Wiley and Sons, New York
	Discuss the implications of each item		Burns, H. S. <u>Purchasing Association of School Business Officials Bulletin</u> #22, 1010 Church Street, Evanston, Illinois

Concepts - Content	Experiences	Evaluation	Resources
	<p>Use the item selected earlier</p> <p>Discuss and write out the specifications which will obtain the exact item desired</p> <p>Student Project: Select a piece of equipment. Write out the considerations for its selection. Write the specifications.</p>		



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Objective: To develop an understanding and skill in the use, care and safe operation of equipment.

Concepts - Content	Experiences	Evaluation	Resources
Electrical Equipment	Supervise student operation of each piece of gas operated equipment	Student demonstration of operation of each piece of gas operated equipment	
Use	<p>List electrical equipment</p> <p>Discuss the electrically operated equipment to be used.</p> <p>Demonstrate each piece of equipment giving advantages and disadvantages of each.</p> <p>Discuss ways you could get greater use out of your equipment</p> <p>Study electrical terms such as circuit, phase, volt, ampers, etc.</p>	<p>Review operations manual. Write specific list of instructions for one piece of equipment</p>	<p>Equipment Company Manual</p> <p>Ranney: <u>Equipment Manual for Equipment 370</u> Erie County Technical Institute, Buffalo, New York.</p>
Care and Maintenance	<p>Illustrate with charts the parts of equipment to be cleaned</p> <p>Discuss various cleaning products and methods used in the maintenance of equipment.</p>	<p>Prepare a paper to be used as instructions for care and cleaning electrical equipment in a quantity food laboratory.</p>	<p>Manufacturers Operations Manuals of equipment</p>
Safe Operation	Point out safety precautions in using equipment.		Equipment Company Manual

Concepts - Content	Experiences	Evaluation	Resources
Mobile Equipment	<p>Illustrate the function of the mobile furniture</p> <p>Emphasize the importance of sanitation when the pieces are put to mobile use.</p> <p>Consider how time and energy may be saved.</p> <p>Discuss the flexibility of the equipment in meeting a variety of operational and serving needs</p> <p>Arrange equipment to meet a variety of needs</p> <p>Demonstrate use and care of ranges</p> <p>Study and discuss the types of ovens</p> <p>Demonstrate the use and care of each</p>	<p>Plan, carry out, and evaluate role playing in motion study</p> <p>Show multiple use of equipment</p> <p>Sanitation techniques</p> <p>Time and energy values</p> <p>Practical experience</p>	<p>The School Lunch, Marion L. Cronon, Charles A. Bennett Company, Inc. Peoria, Illinois</p> <p>Food Service in Industry and Institutions</p> <p>John Stokes (1960)</p> <p>Company Manual</p> <p>Operation Manual Equipment Company</p>
Food Service Equipment			
Ranges			
Conventional			
Modular			
Ovens			
stack or bake			
convection			
microwave			

Concepts - Content	Experiences	Evaluation	Resources
Steamer Steam jacketed kettles	<p>Find out about the history of microwave cookery</p> <p>Study and discuss that models of microwave ovens vary to fill different requirements of meal preparation.</p> <p>Explain and show how this new concept of food preparation operates</p> <p>Show that the machine can be coordinated with a limited menu</p> <p>Show that there are advantages and disadvantages of microwave cookery.</p> <p><u>Use</u> Overhead projection to draw steam lines from source to escape</p> <p>Discuss dangers of steam (heat and pressure)</p> <p>Demonstrate the steps in operating each piece of steam equipment</p>	<p>Performance test: Practice matching of label to control buttons with a simple menu</p> <p>Taste-Test the food prepared</p>	<p><u>The Complete Book of Cooking Equipment</u>, Jule Wilkinson Contributing Editor, Published by Institution Magazine (Copyright 1964) 1801 Prairie Avenue, Chicago</p> <p><u>Understanding Cooking Programmed</u>, Lundberg, Donald Kotschevar, Lendal</p> <p>Gazette Printing Company, Inc. Northampton, Massachusetts 1965</p> <p>Chief of school maintenance or drawing of installation</p> <p>Safety manual Physics teacher</p> <p>Company representative</p>

Concepts - Content	Experiences	Evaluation	Resources
	<p>Discuss the dangers and the precautions which should be followed</p> <p>Demonstrate and practice the operation of steam equipment</p> <p>Write out instructions for the use of each piece of steam equipment</p> <p>Compare the above instructions with the operation manual</p> <p>Review the hazards of steam cooking.</p> <p>Use drawings to locate the safety controls.</p> <p>Demonstrate cleaning and checking the controls</p> <p>Study the sanitary regulations</p> <p>Select the ones which are applicable to the care of steam equipment</p> <p>Study the daily, weekly, monthly and other periodic care of the equipment</p>	<p>Quiz</p> <p>Operation of the equipment</p> <p>Test over steam equipment</p> <p>Quiz on sanitation and safety</p>	<p>Company representative</p> <p>Operation manual equipment manufacturer</p> <p>Clawson, A. H., <u>Safety Manual</u>, Ahern Publishing Co., New York 1966 56</p> <p>Maintenance Manual</p> <p>Company representative</p> <p>State and local Departments of Health</p> <p>Maintenance Manual</p>



Concepts - Content	Experiences	Evaluation	Resources
	<p>Discuss how proper care will reduce service costs and prolong the life of the equipment</p> <p>Demonstrate the complete periodic care of the equipment to be handled by the staff</p> <p>Discuss the need for periodic service checks</p> <p>Investigate and list the advantages and disadvantages of steam and pressure cooking</p> <p>Discuss how the above may be modified by proper procedures and various techniques</p> <p>Cook cabbage using methods such as boiling, steamer, steam jacketed kettle, etc. Compare</p> <p>Discuss the principles of cooking cabbage and the effect of the various cooking techniques</p> <p>Prepare hard cooked eggs in steam kettle, and steamer</p>	<p>Practical exam</p> <p>Written exam</p> <p>Write summarizations of the discussion</p> <p>Check list</p> <p>Write recommendations for cooking procedures for cabbage using the different equipment</p>	<p>Company service representative</p> <p><u>Understanding Cooking</u> Kotschevar and Lundberg <u>Quantity Food Production</u> Kotschevar L. H., Edwards, Bros. Inc., Ann Arbor, Michigan, 1964</p> <p>Foods, Justin, Rust, and Vail Fourth Edition, Houghton Mifflin, Boston, 1956</p> <p>Recipes</p> <p>Above reference and recipes</p>



Concepts - Content	Experiences	Evaluation	Resources
Refrigeration: Reach-in Walk-in Freezer Milk Cooler Ice Maker	Compare for quality, energy spent and preparation time	Check list Write a summary	<u>Kotschevar--Food Service Layout and Equipment Planning</u> , Wiley and Sons New York, 1961  <u>Stokes, Food Service in Industry and Institutions</u> , 1960, John Stokes and Co., Waterton Station, Boston, Mass, 1960  <u>West, Wood, and Harger--Food Service in Institutions</u> Wiley and Sons, New York, 1966  Gunty Health Sanitarium
	Prepare rice pudding in steamer and oven	Check list	
	Prepare corn bread in steam and oven	Check list	
	Discuss importance of refrigeration: Present the different types of refrigerators		
	Compare the uses, advantages and disadvantages of the reach-in and walk-in refrigerator  Discuss and explain the refrigerated equipment lab.  Give list of specialized refrigerated equipment with emphasis on milk  Discuss importance of keeping milk refrigerated. Explain the use and importance of ice maker	Quiz	

Concepts - Content	Experiences	Evaluation	Resources
Dishwashers	Discuss, emphasize, and show the proper care and maintenance of all refrigerated equipment in lab.	Demonstrations by student of use, care, and operation of refrigerated equipment	West, Wood, Harger-- <u>Food Service in Institutions</u> Wiley and Sons, New York
	Demonstrate safe operation of all refrigerated equipment in Lab.		Stokes, John-- <u>Food Service in Industry and Institutions</u> 1960, Equipment Companies
	Supervise student use and operation of all refrigerated equipment in Lab.		Stokes, John-- <u>Food Service in Industry and Institutions</u> John Stokes and Company, Watertown Station, Boston, Mass., 1960
	Explain different types		Kotschevar-- <u>Food Service--Layout and Equipment Planning</u> , Wiley and Sons, New York, 1961
	Compare prices of different machines		Equipment Company Manual
	Discuss, explain and illustrate advantages of machine washing vs. hand washing	Quiz	<u>Food Sanitation</u> --Georgia Department of Public Health--Atlanta, Georgia
	Discuss and emphasize the importance of proper care of dishwasher		
	Demonstrate safe operation of dishwasher (Actually operate machine)		

Concepts - Content	Experiences	Evaluation	Resources
	Supervise student operation of machine	Students operate dishwasher as demonstration	London, Roberta A. <u>The Development of an Educational Program for Food Service Supervisors</u> , Department of Home Economics, Winthrop College, Rock Hill, South Carolina, p. 73
Garbage Disposals	Discuss the separation of garbage and trash  Recognize when to use hand or mechanical garbage and/or trash disposers.  Demonstrate the safe use and proper care of this equipment	Practice the procedures observed in the safe use and proper care of this equipment  <u>Performance Test</u> Assemble the correct coffee maker and grind to use.  Make the coffee pass out samples  Thoroughly clean and store the coffee makers	<u>Food Service Layout and Equipment Planning</u> Kotschever, Lendal, Terrell, Margaret, John Wiley and Sons, Inc., 1961.  Georgia Department of Public Health Chart, <u>Food Sanitation, "Garbage Disposal"</u> 47 Trinity Avenue, S. W., Atlanta, Georgia  <u>Quantity Food Production</u> Lendal H. Kotschever Edwards Brothers, Inc., Ann Arbor, Michigan, 1954.  <u>A Basic Course in Quality Food Preparation</u> by John M. Welch, Florida State University, Tallahassee, Fla.
Coffee Makers	Show the correct pot to use for the type of grind and brew desired. Study principles of making coffee.  Clarify or review the procedure needed in making good coffee using the various types of coffee makers and proper grind		

Concepts - Content	Experiences	Evaluation	Resources
	Cite from the manuals received with each piece of equipment	Check the urn method list for coffee brewers	

Note: Basically the same procedure can be used for tea--other than placing emphasis on oxygen retention.



Concepts - Content	Experiences	Evaluation	Resources
Pre-preparation Equipment Mixers Cutters Choppers Slicers Peelers	<p>Study operations manual for each piece of equipment. Demonstrate the use of each piece of equipment including attachments. Investigate and discuss ways you can get peak performance from the equipment.</p> <p>Emphasize the need for sharpness on cutters, slicers, and choppers</p> <p>Discuss how the safe operation of this group of pre-paration equipments is different from others</p> <p>Emphasize the dangers of over loading equipment</p> <p>Demonstrate proper loads using scales, etc.</p> <p>Discuss why equipment should be cleaned daily.</p> <p>Prepare cleaning schedule for daily, weekly, and monthly cleaning of this kitchen equipment</p> <p>Discuss and show (by record) the cost of repairs on equipment</p>	<p>"Each one, teach one" review operations</p> <p>Review other safety precautions on the equipment in kitchens</p> <p>Rate your kitchen</p>	<p>Equipment Manuals</p> <p>Kotschevar, L. H., and Terrell, M. E.</p> <p><u>Food Service Layout and Equipment Planning</u>, Wiley and Sons, New York, 1961</p> <p>West, Wood, and Harger <u>Food Service in Institutions</u> Wiley, and Sons, New York 1966.</p> <p>Clawson, A., <u>Equipment Maintenance Manual</u>, Aherns Publishing Co., New York</p> <p>Contact local Sanitarian to talk to group.</p>



Concepts - Content	Experiences	Evaluation	Resources
Counter Equipment	<p>Discuss how your type of counter equipment influences safe, sanitary operation</p> <p>Demonstrate opening and closing a cafeteria counter serving line</p> <p>Decide how you can use your equipment efficiently and aesthetically</p> <p>Show how proper care and cleaning will influence the life span of counter equipment.</p>	<p>List some general cleaning procedures for counter equipment</p>	<p>Kotschevar and Terrell <u>Food Service Layout in Equipment Planning</u> Wiley and Sons New York, 1961</p> <p>George and Heckler <u>School Food Centers</u> Ronald Press Company, New York, 1960</p> <p><u>Food Service Industry Training Program and Facilities</u> H.E.W., D.E. Bulletin #32 Washington, D. C.</p> <p>Stokes, John W. <u>Food Services Industry and Institutions</u> Boston, Massachusetts 1960</p>
Dining Room Equipment	<p>Discuss why the undersides of counter equipment must be kept clean</p> <p>Prepare a plan for the routine to be followed in dining room when accidents and spillage occur.</p> <p>List where clean-up equipment will be stored</p> <p>Point out why spills must be cleaned up immediately</p>	<p>Quiz</p>	<p>Stokes, John Food Service in Industry and Institutions John Stokes and Company Watertown Station Boston 72, Massachusetts 1960</p>

Objective: To study and understand the proper use and care of storage equipment

Concepts - Content	Experiences	Evaluation	Resources
	<p>Study best way to prevent break- age of equipment in kitchen and dining room</p> <p>Make a list of the advantages and disadvantages of china and plastic and care of each. Find out cost of each.</p>	<p>Illustrate by drawing or a model, color scheme for a dining room which would illustrate ease in care and maintenance and cleaning. Select the equipment to furnish it.</p> <p>Student project. Make out a master plan (schedule) for the care of the equipment in a food service kitchen.</p>	<p>West, Wood, and Harger <u>Food Service in Institutions</u> Wiley and Sons, New York, 1966</p> <p>London, Roberta <u>The Development of an Educational Program for Food Service Supervisors</u> Department of Home Economics--Winthrop College, Rock Hill, South Carolina.</p> <p>Kotschevar--<u>Food Service Layout and Equipment Planning</u> 1961 Wiley &amp; Sons, N. Y.</p> <p>West, Wood, and Harger <u>Food Service in Institutions</u> Wiley &amp; Sons, N. Y., 1966</p>
<p>Storage Space</p> <p>Shelves</p> <p>Dollies</p> <p>Racks</p> <p>Other</p>	<p>Discuss storage space. Show illustrations and give methods of storage of different foods</p>		

Concepts - Content	Experiences	Evaluation	Resources
	<p>Explain the methods of storage in food lab. Show how shelves can be adjusted and dollies used for different situations</p> <p>Tell the importance of proper care and maintenance of storage space equipment</p> <p>Instruct students in safe operation of dollies adjustable shelves, racks etc. Demonstrate all of this equipment</p>	<p>Quiz</p> <p>Student participation in storage of goods for lab.</p>	<p>West, Wood, Harger--<u>Food Services in Institutions</u> 1966 Wiley &amp; Sons, N. Y., 1966</p>

## **FOOD PURCHASING**

### **Objective :**

**To develop an understanding of the policies, practices,  
and procedures used in purchasing food in quantity.**

## FOOD PURCHASING

**Objective:** To develop an understanding of the policies, practices, and procedures used in purchasing food in quantity.

Concepts - Content	Experiences	Evaluation	Resources
<b>FOOD PURCHASING</b>			<u>School Food Centers</u> , George & Heckler, The Ronald P ess Co., New York, 1960
<b>Policies</b>	Explore the various factors that affect the buying procedures of various institutions		<u>Quantity Food Purchasing</u> Kotschevar, Edwards Bros. Inc., Ann Arbor, Michigan
<b>Terms</b>	List and define the terms used in quantity buying.		<u>Hospital Food Service Manual</u> American Hospital Association 1960, 840 N. Lake Shore Drive Chicago, Illinois.
<b>Practices</b>	Analyze the practices affecting the purchasing of various types of food		<u>Food Purchasing Guide for</u> <u>Group Feeding</u> , Ag. Handbook 284, University of Georgia Athens, Georgia
<b>Selection</b>	Point out factors that affect the selection of foods.		<u>Quantity Laboratory Manual</u>  Food Service Administration, Department Staff--Erie County Technical Institute 1964
<b>Orders and Deliveries</b>	Discuss procedures for placing orders. Review various types of requisition and purchase orders  Prepare requisitions and purchase orders  Check delivery tickets and statements against purchase orders.  Visit produce houses, study and observe their records of forms for orders of deliveries	Results of objective and performance test to determine the students understanding of purchasing quantity foods.	Same as above



## **STORAGE AND HANDLING**

### **Objective**

**To become aware of proper storage of food.**

## STORAGE AND HANDLING

**Objective:** To become aware of proper storage of food.

Concepts - Content	Experiences	Evaluation	Resources
Storage and Handling  Location and Flow	Discuss the location of storage room in relation to the food service department  Compare storage rooms in various food service establishments. List the advantages and disadvantages of the location of each.	Sketched results will indicate the understanding gained by class	Wiley and Sons, New York, 1966  <u>Food Service Manual</u> American Hospital Association, 840 N. Lake Shore Drive, Chicago, Illinois, 1954
Staples and Canned food supplies	List the requirements of dry food storage area.  Organize a dry storage area with emphasis on space, construction, and equipment		<u>Food Service Fundamentals</u> , Vol. 1, C.D. C62200 Air University, Gunter Air Force Base, Alabama, 1962
Refrigeration	Review and study the practical maximum temperature for some typical foods.	The results of an assigned project to plan a food storage area will point out learning understood by students	Same as above
Other Products	Discuss methods for preparing foods for refrigeration and freezing.  List foods which require special temperature controls.		
Stock Control	Plan methods to protect against unauthorized use.  Devise a system for keeping accurate inventories of stock	Evaluate these systems	

## **FOOD PREPARATION**

### **Objectives:**

- To develop an understanding of the principles of cooking food.**
- To develop an understanding of the problems of food production in large quantities.**
- To acquire skills in quantity production of different types of foods.**
- To acquire interests and skills in the use of new food products.**

## FOOD PREPARATION

**Objective:** To develop an understanding of the principles of cooking food.

Concepts - Content	Experiences	Evaluation	Resources
Cookery Terms	Learn the terms commonly used in food preparation such as: baste bake mince, etc.	Written test	Department of Foods and Nutrition, School of Home Economics <u>Practical Cookery</u> John Wiley and Sons New York, 1956 <u>Better Homes and Gardens Cookbook</u>
Principles of Cookery Processes	Identify cooking processes such as baking, stewing, etc. Learn principles of cooking by moist heat, dry heat, hot oil, water, etc.	Performance Tests	Fowler, West, and Shugart, <u>Food for Fifty</u> Wiley and Sons, Fourth Edition, N. Y., 1961
Food Composition	Study food composition and its relation to cookery process.		
Heat and Cold	Show effects of heat and cold on food composition, preparation, and storage by using proper and improper methods	Rating scales on food acceptability Experiments	Commercial Food Company Manuals
Standardized recipes	Compare quantity recipes to family sized ones.  Prepare foods by both.  Collect a recipe file. Study of tables of weights, measure, abbreviations, equivalents, and substitutions.	File of quantity recipes Wall charts prepared	Amendola, <u>The Baker's Manual</u> Ahern Book Company, New York, (Division of Hayden Publishing Company)

Objective: To develop an understanding of the problems of food production in large quantities.

Concepts - Content	Experiences	Evaluation	Resources
Portion Control	Discuss ways and means of portion control in food preparation.	Experiments	Kotschevar, <u>Quantity Food Production</u> , <u>Edwards Bros., Inc.</u> , Ann Arbor, Michigan, 1964
Food Waste	Calculate costs of edible portions of foods. Demonstrate methods of preparation to avoid waste. Calculate waste costs.	Experiments. Weigh and Measure	Culinary Institute of America-- <u>The Professional Chef</u> , Institutions Magazine 1801 Prairie Avenue, Chicago (especially good for illustrations)
Specialized equipment	Demonstrate use of specialized equipment available such as microwave ovens, steam cookers, etc. Field trip if not--Study equipment catalogs.	Written report	Treat and Richards <u>Quantity Cookery</u> , Little Brown Company Boston, 1951
Techniques of food preparation	Provide experiences in methods and techniques in the preparation of various types of food	Compare with pictures in cookbooks and posters.	Kotschevar, <u>Quantity Food Production</u> , <u>Edwards Bros., Inc.</u> , Ann Arbor, Michigan Culinary Institute of America <u>The Professional Chef</u>
Appetizers and Soups Beverages Bread Entrees	Use small recipes to learn techniques Practice enough to develop skill	Taste testing Rating score cards Taste test panels	Standardized quantity recipes and directions from reliable texts, commercial companies and government bulletins



Concepts - Content	Experiences	Evaluation	Resources
Meat Poultry Sea Foods Main dish combinations	Use quantity recipes to develop reality of quantity cooking		Donaldson and Johnson, <u>Standardized Quantity Recipes</u> , College Printing and Typing Company, 453 West Gilman Street, Madison Wisconsin
Sauces and Relishes	Demonstrate with student participation, when group preparation of food is not practicable		U.S.D.A. <u>Quantity Recipes for Type A School Lunches</u> 1965, P. O. 631, Supt. of Doc., Washington, D. C. 20402, \$3.50
Vegetables			Lundberg and Kotschevar <u>Understanding Cooking Programmed</u> University Store, University of Massachusetts, 1965
Salads and Salad Dressings			Programmed Self-Testing in L. & K.
Sandwiches			
Desserts and Confections			
Cake-frosting-fillings			
Cookies			
Pastry			
Dairy Products			
Breakfast Cookery			
Pasta and Rice			

Objective: To acquire skills in quantity production of different types of foods.

To acquire interests and skills in the use of new food products.

Concepts - Content	Experiences	Evaluation	Resources
<p>Special Problems</p> <p>Convenience foods</p> <p>Frozen fresh</p> <p>Frozen prepared</p> <p>Instant</p> <p>Ready-mix</p> <p>Partially prepared and ready-to-cook</p> <p>Dehydrated</p> <p>Others</p> <p>Special Meals</p>	<p>Use as many convenience and special foods as available</p> <p>Use of as many new speed processes as equipment permits</p> <p>Serve several special meals to various groups using different menus and for different occasions</p>	<p>Comparison with foods prepared in conventional procedures</p> <p>Comparison of costs of convenience vs. fresh foods as ready-to-eat portions</p> <p>Evaluation of working plans versus actual results</p>	<p><u>Institutions Magazine</u> recent issues \$10.00 per year. Medalist Publications 1801 Prairie Avenue, Chicago, 60616, Feature in May, 1966 issue</p> <p><u>Institutions Magazine</u> <u>Convenience Foods</u> I.M. Reprint, \$.50</p> <p>Fowler, West, and Shugart, <u>Food for Fifty</u> Wiley &amp; Sons, N.Y., 1963</p> <p>Lasher, <u>The Banquet Chairman's Manual</u> American Technical Society, Chicago</p>

## **FOOD SERVICE**

### **Objectives:**

**To understand the principles involved in proper food service**

**To develop skills in merchandising foods**

**To develop knowledge of and skills in cleaning methods for different types of food services.**

**To develop ability to evaluate food service operations**

Concepts - Content	Experiences	Evaluation	Resources
FOOD SERVICE	<u>Overview</u> Review principles of cookery Point out the value of coordinating food preparation with food service Discuss the rules that apply to any style of serving Discuss how the type of service dictates the type of service offered Discuss rules that apply to any style of serving	Compare study notes with lecture--discussion outcomes	Georgia Department of Public Health <u>Food Service Training</u> 47 Trinity Avenue, S. W. Atlanta, Georgia 30334
Tray Service	Point out the history of tray service Study information needed for tray assembly Identify the methods of tray assembly centralization decentralization Discuss the aesthetic value in tray assembly	Practice and observe setting up trays Evaluate the methods used Follow-through for improving (techniques or) methods used. appearance balance aesthetic	West, Bessie B., Wood, Levelle, Harger, Virginia <u>Food Service in Institutions</u> John Wiley and Company, N.Y. Welch, John, <u>A Basic Course in Quality Food Preparation</u> Florida State University. Tallahassee, Florida
Table Service	Determine guide lines for setting the table for the specific service Discuss origin of the names of the types of table service	Mock Service using menu forms and the various types of service	Georgia Department of Public Health, <u>Food Service Training</u> 47 Trinity Avenue, S. W. Atlanta, Georgia 30334

Concepts - Content	Experiences	Evaluation	Resources
Buffet	Show different types of menu forms for the occasion	Mock menu forms student made	Ibid Georgia and Florida Manuals
	Determine guidelines for displaying menus		
	Review the general points of table setting		
	Define the different kinds of buffet service		
Cafeteria	List the foods suitable for buffet service including beverages	Evaluate and compare	Ibid Food Service Training, Florida
	Illustrate table kept attractively set-up through buffet service		
	Illustrate one not kept and one attractively kept		
	Illustrate Cafeteria Service		
Vending	Discuss table set up	Practice 1-6	Craig's Chart of Georgia
	Counter Service		
	Use of guest checks		
	Portioning of food		
Vending	Define duties of the server	Field trip to Vending Establishment (local)	Ibid--West, Wood, Harger
	Scheduling the servers		
	History of vending		
	How plans differ for the preparation and service		
			Kotschevar, Lendal, Terrell, Margaret, Food Service Layout and Equipment (1961) John Wiley and Sons, N.Y.



Concepts - Content	Experiences	Evaluation	Resources
	<p>High Sanitation Standards</p> <p>Observe vending operations</p> <p>Careful selection of vending materials</p> <p>Aesthetic aspect of vending (food display)</p> <p>Define banquet</p> <p>List variations of banquets</p> <p>Consider the prerequisites for an enjoyable banquet</p> <p>Plan a banquet</p> <p>Plan and serve a banquet</p>	<p>Consult with Bacteriology Professor or Local Health Dept.</p> <p>Overall evaluations and follow through</p> <p>Overall evaluations and follow through</p>	
Banquets			
Catering	<p>Discuss various types of catering services</p> <p>Plan experiences for catering parties, receptions, weddings, etc.</p> <p>Discuss and demonstrate the art of catering</p> <p>Recall the principles involved in food service</p> <p>Use pictures or films of tray service</p> <p>Discuss the trays in relationships to the principles of correct tray service</p>	<p>Use check list for evaluating banquet use rating sheet</p>	<p>Lasher, Willard <u>The Banquet Chairman and Manual</u></p> <p><u>Planning that Brings Applause and Merit--Praise</u></p> <p>American Technical Society, Chicago, Illinois</p> <p>Magazines on Teacher prepared <u>A Guide to Nutrition and Food-Service for the Aged</u>. Public Health Service Publication #130g 1965, U.S. Gov't Printing Office, Washington, D.C.</p> <p>Kotschevar &amp; Terrell, <u>Food Service Planning</u>, Wiley &amp; Sons, N.Y., 1961</p>

Concepts - Content	Experiences	Evaluation	Resources
Cafeteria Service	<p>Visit a hospital kitchen, school lunch, etc.</p> <p>Observe the trays as served and the methods of serving the trays</p> <p>Study tray service. Using mobile laboratory equipment. Set up a system for centralized tray service for a hospital</p> <p>Discuss methods of decentralized tray service</p>	<p>Written summary of the field trip. Evaluate the appeal of the tray and the method of service</p> <p>Plan, prepare, and serve on trays a variety of menus</p> <p>Quiz</p>	<p>London, R. A., <u>The Development of an Educational Program for Food Service Supervisors</u>, Winthrop School, Rock Hill South Carolina, p. 47</p> <p>Welch, John M. <u>A Basic Course in Quantity Food Production</u>, F.S.U. Tallahassee, Florida</p> <p><u>*Food Service Industry Training Programs and Facilities</u> Superintendent of Documents, Washington, D.C.</p> <p><u>Food Service Industry Training Programs and Facilities</u> Vocational Division Bulletin #298 Superintendent of Documents Washington, D. C.</p>
	<p>Study the pre-preparation of setting up a cafeteria counter</p> <p>Visit a large cafeteria and observe the preparation of the serving counter</p> <p>Discuss all of the steps seen and methods of food display</p> <p>Plan food to be served and the placing of it on a cafeteria line</p> <p>Arrange mobil serving counters to accomodate several different needs.</p>	<p>Drawing of the cafeteria line.</p>	

Concepts - Content	Experiences	Evaluation	Resources
	<p>Students may demonstrate the plans which they had drawn up.</p> <p>Visit (group) a cafeteria. Select food and eat in the dining area</p> <p>Record foods selected by the group</p> <p>Analyze the food as to its palatability Was it as good as it looked?</p>	<p>Check list to determine why the food was selected</p> <p>Test</p>	
Other types of service	<p>In a similar manner, study, analyze, practice, and if possible be a guest in each of these four types of service:</p> <p>Buffet Table Catering Vending Machine</p>		
PREFERENCE OF FOOD SERVICE	<p>Study the psychology of food selection and eating.</p> <p>List factors which affect food selection and eating.</p> <p>Discuss the relationship of these factors to individual preference</p> <p>Suggest ways in which food may be served in each of the types of food service</p>		<p><u>Foods</u>, Justin, Rust, and Vail, Fourth Edition, Houghton Mifflin Co., Boston, 1956</p>

Concepts - Content	Experiences	Evaluation	Resources
Modified diets	<p>Use menus from various types of food services and plan the service to accomodate a variety of food preferences</p> <p>Review the elements of an adequate diet.</p> <p>Discuss the importance of eating all of the modified diet</p> <p>List ways of serving which encourage one to select, eat and enjoy the essential foods in the diet.</p> <p>List (recall) the factors which affect food selection and eating</p> <p>Study the importance of careful measurements in serving modified diets.</p> <p>Visit a hospital diet kitchen and observe techniques of serving modified diets.</p> <p>Review the dietary needs of different age groups</p>	<p>Write a summary of all the above</p> <p>Quiz</p>	<p><u>A Guide to Nutrition and Food Service for Nursing Homes and Homes for the Aged</u> Public Health Service Publication #1309 U.S. Gov't Printing Office, Washington, D. C., 1965</p> <p>Fleck and Munves, <u>Introduction to Nutrition</u> MacMillan Co., New York, 1962</p>



Concepts - Content	Experiences	Evaluation	Resources
AESTHETIC VALUE OF FOOD SERVICE	Visit a child care center. Observe the service of food to different age groups	Write a summary of the visit  Test  Compare pictures of various food for aesthetic factors involved	Justin, Rust, and Vail-- <u>Foods</u> Houghton Mifflin Company, Boston, Massach- usetts, Riverside Press Cambridge, 1956  Alcoa or one of the aluminum foil manufacturers puts out a book on decorations  <u>A Guide and Nutrition and Food Service for Nursing Homes and Homes for the Aged</u> U. S. Department of H.E.W. U.S.Gov't Printing Office, Washington, D.C.  Stokes, John, <u>Food Service in Industry and Institutions--</u> <u>John Stokes and Co.</u> , Watertown Station, Boston, Mass.. 1960
	Visit a home for the aged and observe the service of the food and its reception by the patients		
	Prepare a list of factors involved in the artistic display of food.		
	Show how interesting food may be served to geriatric patients		
	Find out what special considerations are needed for attractive service for all ages		
CLEAN UP PROCEDURES	Recall proper sanitation methods of general clean up procedure		
Tray Service	Discuss and demonstrate proper tray-service clean up		



Concepts - Content	Experiences	Evaluation	Resources
Table Service	Visit a hospital or institution that has tray service and observe clean up procedures	Students participate in tray service clean up	<u>Food Sanitation, Georgia Department of Public Health Atlanta, Georgia</u>
Cafeteria Service	Recognize the importance of proper clean up methods for table service	Students carry through clean up method for table service	<u>Establishing and Operating a Restaurant---Superintendent of Documents---U. S. Government Printing Office Washington, D. C.</u>
Buffet Service	Demonstrate the well-kept cafeteria counter and explain the necessity of meeting sanitary standards	Student participation and demonstration of proper cafeteria clean up	State Board of Health
Catering Service	Give general cleaning procedures for cafeteria counter		
	Recognize the value of Buffet clean up service. Practice proper Buffet clean up methods. Demonstrate proper Buffet clean up methods.		
	Study methods of catering clean-up.		<u>Smith, Evelyn, A Handbook on Quantity Food Management 1964</u>
	Compare methods of catering clean-up.		
Vending Machines	Demonstrate clean-up methods		
	Find out different methods for vending machine clean-up (Food Preparation and Machine). Discuss vending machine clean-up. Present recommended method for vending machine clean-up	Quiz	<u>Stokes, John, Food Service in Industry and Institutions John Stokes and Co., Watertown Station, Boston, Mass., 1960</u>

Concepts - Content	Experiences	Evaluation	Resources
EVALUATION OF FOOD SERVICES	<p>Evaluate centralization and de-centralization as it relates to the quality of the various types of food services</p> <p>Check the factors which influence the quality of food served in any institutions</p>	<p>Visit various institutions with different types of service and write an evaluation of each type</p>	<p>Stokes, John W., <u>Food Service in Industry and Institutions</u>, John Stokes and Company, Watertown Station, Boston 72, Massachusetts, 1960</p> <p>Cronan, Marion, <u>The School Lunch</u>, Charles A. Bennett Company, Peoria, Illinois 1962</p>
	<p>Plan a work sheet to evaluate method of checking the quality of food service in a cafeteria or dining room.</p> <p>Prepare and use a patient check list to evaluate food quality and acceptance in a hospital</p> <p>Set up a student advisory council for a school lunch to help in the evaluation of program.</p>	<p>Run a check on your own food service and implement improvements</p>	

## **SANITATION, SAFETY AND CARE OF FACILITIES**

### **Objectives on Sanitation:**

- To gain an understanding of the need for healthy practices in sanitation and personal hygiene for food service establishments.

### **Objectives for Safety:**

- To understand and apply standards of safety
- To make food service establishments safe
- To understand how to prevent accidents
- To gain the ability to apply first aid techniques
- To understand protective legislation that affects workers

### **Objectives for Care of Facilities:**

- To develop the ability to care for facilities in food service establishments
- To develop ability and skill in using sanitary dishwashing procedures and in handling and storage of dishes, glasses, silver and cooking utensils

## SANITATION.

**Objective**      •To gain an understanding of the need for healthy practices in sanitation and personal hygiene for food service establishments.

Concepts - Content	Experiences	Evaluation	Resources
<b>SANITATION</b>  Principles of Sanitation Nature, growth, and destruction of Bacteria  Contamination of food	Study nature, growth, and destruc- tion of bacteria  Demonstrate the growth on cultures  Study food contamination and food poisoning  Show and emphasize growth of bacteria in: Food Working Areas Production and Service Tasting technique Refrigeration and storage Dishwashing  Visit food service establishments to point out these principles of sanitation  Discuss media of transmittal-- animal    insect rodent    food human    equipment		American Institute of Baking Bulletin, <u>Sanitation</u> January 1965, 400 E. Ontario St., Chicago 11, Illinois  "Sanitary Food Service" NAVMED P1333, June 1953  Stokes, John W., Food Service in Industry and Institutions, John Stokes & Co., Watertown Station, Boston, Mass, 1960  Food Sanitation flip chart-- Georgia Dept. of Health, Atlanta, Ga.  "From Hand to Mouth" U.S. Department of Documents U.S. Gov't Printing Office, Washington, D.C.



Concepts	Experiences	Evaluation	Resources
Principles of Health and Personal Hygiene	<p>Define and/or clarify terms involved analyzed relation of disease and sanitation standards</p> <p>Study and practice high standards of physical fitness and personal hygiene</p> <p>Point out need for health and medical check-ups</p> <p>Review nutritional needs and relate to personal health</p> <p>Discuss eating habits</p> <p>Develop and practice good health habits</p> <p>Recognize high standards of body, hair, and clothing cleanliness. Set up personal standard to be maintained--(must meet local and state sanitation standards)</p> <p>Discuss philosophy of ordinances and codes</p> <p>Invite a local or state sanitation officer to discuss the ordinance</p>		<p>"Pass Out" Sheets Superintendent of Documents Washington, D. C.</p> <p>Practical Nutrition, Peyton-- 2nd Edition</p> <p>"Food Service Fundamentals"</p> <p>Public Health, Bulletin #280 U. S. Public Health</p>
General Personal Appearance			
Sanitation Laws and/or Regulations Local State			



Objective: To understand and apply standards of safety

Concepts - Content	Experiences	Evaluation	Resources
SAFETY STANDARDS	<p>Define terms: ordinance code others</p> <p>List ordinance. Items--Identify standards to be maintained for each</p>	Check charts	<p>16-MM Film, "Behind the Menu"</p> <p>Filmstrip--"Our Health is in Your Hands"</p> <p>West, Wood, and Harger, <u>Food Service in Institutions</u> 1966, John Wiley and Sons</p>
	<p>Prepare a check list from reading reading references on standards</p> <p>Check one or more establishments according to standards</p>	<p>Test</p> <p>Check list concerning: Traffic lanes Color Coding Slippery floors Equipment guards First aid supplies Fire Extinguishers Fire blankets Worker-habits</p>	<p>Clawson, <u>Equipment Maintenance Manual</u>, Ahrens, New York</p>
	<p>Conduct training sessions emphasizing correct habits with Demonstrations Films Manuals Orient new students as new employees Demonstrate proper use of equipment</p>		<p>Equipment Manuals Newspaper articles</p>

Safe Work Habits

Objective: .To understand how to prevent accidents

Concepts - Content	Experiences	Evaluation	Resources
Common Hazards	List usual hazards. Read accident reports and compile statistics	Charts and graphs	Film: "Don't be the Missing Link" National Safety Council
Accident Prevention	Demonstrate proper use of equipment and tools		Bulletins: State Department of Sanitation, Safety or Industrial Safety and Inspection Atlanta, Georgia
	Emphasize points of danger	Storage charts	Insurance company bulletins
	Examine cupboards, drawers, and other places for means of safer storage		
	Observe a worker to determine safe and unsafe work habits	Check list of work practices	National Safety Council Bulletins Chicago, Illinois
	Demonstrate use of safe practice in: Handling Heat Sharp Instruments Breakage Spillage Lifting Electricity Cleaning Equipment Automatic Cut-Offs Signal Lights Sprinkler systems	Color codes for danger spots: Traffic Lanes Poisons Inflammables Lighting Emergency devices  Attractive Charts and posters	

# Objectives .To gain the ability to apply first aid techniques

## .To understand protective legislation that affects workers

Concepts - Content	Experiences	Evaluation	Resources
First Aid Techniques	Demonstrate first aid techniques Practice View films Study reporting procedures Establishments for treatment and reference	Performance	Red Cross Manual, Bulletins from Insurance companies National Safety Council, or State Departments Local Red Cross Office
Liability for Customer Safety	Study insurance clauses, legal restrictions for liability  Read newspaper reports of lawsuits. Examine the building for possible hazards.	Check list. Recommend improvements	Consultants of lawyer, insurance representative, State Department of Workmen's Compensation Industrial Personnel Manager
Protective Legislation for Workers	Study the provisions of State Workmen's Compensation  Discuss supervisor's responsibility for prevention of accidents to workers. Discuss supervisor's responsibility to the employer to prevent unfair claims and practices.  Study local and state codes  Secure a speaker from industry to explain liability for workers  Study methods of reporting injuries	Test	Copies of state and local codes and regulations

Objective:

CARE OF FACILITIES

To develop the ability to care for facilities in food service establishments

Concepts - Content	Experiences	Evaluation	Resources
CARE OF FACILITIES	<p>Operations that need attention:</p> <p>Proper floor cleaning and floor cleaning equipment</p> <p>Storage and storage space. Right place for food equipment, utensils, etc.</p> <p>Clean locker and dressing room for workers</p> <p>Clean toilets</p> <p>Arrangement of shelves to permit ease of cleaning.</p> <p>The use of detergents, etc.</p> <p>Ventilator</p> <p>Adequate lighting</p> <p>Special cleaning problems (floor, dough on floors and equipment, meat blocks, etc.)</p> <p>Safe working conditions</p> <p>Janitors closets</p> <p>Discuss, compare and experiment with different methods of cleaning equipment and cleaning supplies</p> <p>Study different types of floors and coverings and correct methods of care</p> <p>Experiment with cleaning agents. Use and store carefully</p>	<p>Score</p> <p>Choose</p>	<p>Film: "Company's Coming" "Personal Hygiene"</p> <p>West, Wood, Harger <u>Food Service in Industry</u> John Wiley &amp; Sons, N.Y. 1966</p> <p><u>A Guide to Nutrition Food and Service</u>, U.S. Dept. of Health, Education &amp; Welfare--Public Health Service, U.S. Gov't Printing Office, Washington, D.C.</p> <p>U.S. Department of Health, Education, &amp; Welfare <u>Sanitary Food Service</u> Instructors Guide, 1953 \$1.25, Washington, D. C.</p> <p>ADA Part II, <u>Outline of Hospital Experiences</u></p> <p><u>Sanitation Manual</u>, American Institute of Baking 400 E. Ontario Street Chicago, Illinois</p>



Concepts - Content	Experiences	Evaluation	Resources
	<p>Discuss wall and ceilings Ease of cleaning Attractiveness</p> <p>Stress the importance of safety measures. Point out that good housekeeping prevents accidents</p> <p>Set up standards of good housekeeping techniques</p>		



Objective:

To develop ability and skill in using sanitary dish washing procedures and in handling storage of dishes, glasses, and silver and cooking.

Concepts -- Content	Experiences	Evaluation	Resources
DISHWASHING	<p>Make and discuss job analysis of dishwashing</p> <p>Review sanitation standards and control of bacteria</p> <p>Stress the key points in dishwashing the "How and "why"---proper detergents</p> <p>Discuss and demonstrate procedures for washing dishes by hand and machine--Show Films</p> <p>Observe the size and location of units and equipment--temperature controls</p> <p>Emphasize the importance of correct temperatures</p> <p>Practice and gain assurance skill in operating dishwasher</p> <p>Study how to replace parts starting and stopping machine, proper cleaning and oiling</p>	<p>Check and score regularly</p> <p>Check list for procedures</p> <p>Performance</p>	<p><u>Sanitary Food Service</u> U. S. Department of Health, Education and Welfare, 1953 U.S. Gov't Printing Office, Washington, D.C.</p> <p><u>Equipment Magazines</u> <u>Institutions</u>, Hobart, Etc. Chicago, Illinois</p> <p>West, Wood, and Harger <u>Food Service in Institutions</u> \$12.00, Wiley &amp; Sons, New York, 1966</p> <p>Films on Communicable Diseases--State Dept. of Health, Atlanta, Ga. Films: "In Hot Water" "Dishwashing by Hand" "Dishwashing Dividends" "Our Health in Your Hand"</p> <p><u>Stokes, Food Service in Industry</u>, 1960, American Institute of Baking, John Stokes Co., Boston, 1960</p> <p>Clawson, <u>Equipment Maintenance Manual</u>, Aherns Publishing Co., New York</p>
Sanitation	Discuss need for strict sanitation in this area		

Concepts - Content	Experiences	Evaluation	Resources
Safety	Study and experiment with proper use of detergent, and chemicals amounts required, cost	Samples of	
	Observe routine procedures for cleaning dishwashing area (Floors, equipment, walls)	Check sheet Manuals	
	Stress safety practices at all times. "Dishwashing Can Be Dangerous"	Check Sheet Manuals	
	Study equipment, magazines and/or take a tour of Food Service establishments to observe different type of dishwashing machines		

## RECORDS AND REPORTS

### Objectives:

- To develop some understanding of the value and purposes of records and some skill in keeping these
- To develop an understanding of the need to make accurate reports to state and federal agencies

Objective: •To develop some understanding of the value and purposes of records and some skill in keeping these

Concepts - Content	Experiences	Evaluation	Resources
RECORDS AND REPORTS <u>Records</u>  . Value of Records	<p>Discuss the purposes of keeping records for both individual and business reasons.</p> <p>Display and explain various kinds of records required for food service establishments.</p> <p>Discuss that the forms and types of records will vary according to management and size of establishment</p>		<p>Consultant--Food Service Manager, Owner, or Accountant</p> <p>West, Wood, and Harger, <u>Food Service in Institutions</u></p>
. Types of Food Service Records  Equipment  Purchasing	<p>Invite a dietitian or food service supervisor to discuss the records kept on equipment to record purchases made, cost and maintenance, inventory, records, etc.</p> <p>Discuss kinds of records that one used for purchasing such as requisitions, disbursements, etc. Invite someone to discuss programmed systems used in large food service establishments to make inventory and stockroom records.</p>		<p>U.S.D.H.E.W. <u>Guide in Nutrition and Food Service for Nursing Homes</u> U.S. Gov't Printing Office, Washington, D.C.</p>

## REPORTS

Objective: To develop an understanding of the need to make accurate reports to state and federal agencies.

Concepts - Content	Experiences	Evaluation	Resources
Production	<p>Explain and practice calculating the number of people served per meal in a specific food establishment, and then calculate the following:</p> <ul style="list-style-type: none"> <li>Portion cost per meal</li> <li>Cost of a recipe</li> <li>Cost of a menu</li> <li>Labor costs</li> </ul>		
Personnel	<p>Discuss using a profit and loss statement</p> <p>Discuss the personnel records which are kept on food service employees such as, insurance, wage and hour records, etc.</p>		
<p><u>REPORTS</u></p> <p>State Reports</p>	<p>Discuss the types of State reports that are required to be made for food service establishments.</p> <p>Invite speakers to explain the laws that concern these reports and how the reports are expected to be made considering those kept for sales tax purposes, unemployment compensation workmen's compensation, etc.</p> <p>Practice filling in forms for workmens compensation and making reports required by state.</p>		<p>Booklets from appropriate state agencies. Consultant: State Tax Agent</p> <p>Copies of the law of Workmen's Compensations and Interpretations. Visit State Employment Security Office or have speaker</p>



Concepts - Content	Experiences	Evaluation	Resources
<p>Federal Reports</p> <p>Social Security</p> <p>Withholding tax</p> <p>Commodity Foods</p>	<p>Discuss reasons why social security was developed to help workers</p> <p>Make a trip to a social security office or invite someone from the local office to explain the regulations and show reports forms which need to be kept by food service establishments</p> <p>Examine reports forms used for social security withholding tax commodity foods</p> <p>Practice making report forms accurately for the various federal agencies.</p>		<p>Forms for use in making Social Security reports, withholding tax and commodity foods</p>

## APPENDIX A

### HOME ECONOMICS EDUCATION VOCATIONAL DIVISION SOUTH CAROLINA DEPARTMENT OF EDUCATION

#### Survey Forms To Help Determine Local Needs For Three Home Economics Occupational Employment Programs

Factors which help determine the advisability of developing occupational employment programs in a local community are opportunities for employment and a sufficient number of persons who are interested in and have aptitude for training.

To help local school personnel secure information concerning employment opportunities and pupil interest, survey forms have been developed for interviewing.

1. Businesses which employ workers in group care of children, as clothing construction aides, or as workers in food service occupations.
2. Homemakers concerning services needed in the home.
3. Pupils to determine interest in taking courses which prepare them for employment in group care of children, as clothing aides, or in food service.

#### Use of Survey Forms

##### Survey of Businesses: (green forms)

1. With the help of an advisory committee, identify business firms and agencies which have employment needs for persons in group care of children, for persons with sewing skills, and for persons in food service. Select a representative sample of each of these types of business.
2. Survey the selected sampling of business firms and agencies (green forms). The person responsible for employment or in a position of authority usually is more interested in giving accurate information.

##### Survey of Homemakers: (blue forms)

Homemakers of a community are key persons to indicate the types of services they need and whether they prefer to employ trained workers. The blue sheet is designed to gain this information from a representative sample of homemakers.

### Survey of Pupils: (pink form)

The success of any occupational employment program depends upon the interest and attitudes of those enrolled. One means of securing information about these factors is through the survey of pupils, **WEIGH YOUR FUTURE CAREFULLY**. This survey may be administered in at least two different ways:

1. Potential trainees may be screened for general interest in such a program by the home economics teachers, guidance counselor, principal and others. The survey could then be given to this group who will have already expressed some interest in the program.
2. All pupils who have had some previous high school home economics could be surveyed to determine interest in becoming employable in one of the three occupations.

### Gathering the Information

It is suggested that the personal interview technique be used as much as possible in administering the surveys. This method enables a more thorough explanation of the program and affords an interpretation of the questions involved. One exception might be the survey of pupil interest where groups may be assembled and given similar guidance in completing the survey.

Various individuals and groups may participate in making the surveys and in analyzing the data collected. Home Economics teachers are in a good position to survey pupil interest in occupational programs. Cooperation of others in the school including administrators and guidance counselors would be helpful in identifying pupil-interest.

The advisory committee for home economics wage earning programs can assist in surveying homemakers and businesses. Other groups such as women's clubs, PTA's, Employment Services, etc., may lend valuable assistance in these surveys. Involvement of several people or groups is advised in order to gain more interest and support for the program.

### Tallying the Information

Blank survey forms offer a simple means of tallying information gained. If space is not adequate, tally sheets may be prepared using the outline from the survey.

### Analyzing Information Gained

Information gained through the surveys is discussed and analyzed by the home economics teachers, school administrators, advisory committee and others involved in planning the program. If results of the surveys clearly point toward

one occupation, the decision as to which course to offer is clear. If, however, the results from the groups surveyed do not coincide as to employment opportunities and trainee interest, then those responsible for the programs must analyze the results of the surveys to determine which occupation has the most promise of success from all standpoints. Additional survey forms may be needed to identify other occupations for which programs should be developed in a local school.

If a decision is made to offer a specific occupational course, the school administrator submits two copies of "Data and Plans for An Occupational Course in Home Economics" to District Supervisor of Home Economics. State Policies in "A Guide for Developing Occupational Programs in Home Economics Education", will be helpful in developing plans for an occupational program.

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Appreciation is expressed to Kentucky, Oklahoma, and Alabama State Supervisors, Home Economics Education for permission to adapt and use some of their materials-- The Kentucky "Guides for Using Survey Forms to Help Determine Local Needs for Three Home Economics wage-earning Programs", and the Oklahoma leaflet, "You Can Learn, Earn, Serve, Progress Through Gainful Employment in Home Economics."

(Business Survey)

SURVEY OF BUSINESSES WHICH EMPLOY PERSONS  
IN GROUP CARE OF CHILDREN

1. Name of Business\_\_\_\_\_

2. Name of Director or Manager\_\_\_\_\_

3. Type of Business

\_\_\_\_\_Day care center

\_\_\_\_\_Children's home

\_\_\_\_\_Day nursery

\_\_\_\_\_Children's ward in hospital

\_\_\_\_\_Kindergarten

\_\_\_\_\_Other, (please list)  
\_\_\_\_\_  
\_\_\_\_\_

4. How many employees do you have?

\_\_\_\_\_Full-time

\_\_\_\_\_Part-time

5. What age range do you prefer to employ?\_\_\_\_\_

6. What is the approximate length of service of these employees?

\_\_\_\_\_1 year or less

\_\_\_\_\_1 - 5 years

\_\_\_\_\_5 - 10 years

\_\_\_\_\_10 years or longer

7. When vacancies do occur how difficult are they to fill?

\_\_\_\_\_Easy, many qualified applicants

\_\_\_\_\_Informal means as word of  
mouth

\_\_\_\_\_Several qualified applicants

\_\_\_\_\_Others, such as\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_Few or no qualified applicants



8. Where do you go to find persons to fill jobs?

\_\_\_\_\_ Advertise

\_\_\_\_\_ Informal means as word  
of mouth

\_\_\_\_\_ Notify employment service

\_\_\_\_\_ Others, such as \_\_\_\_\_

\_\_\_\_\_ Notify commercial employment  
agencies

\_\_\_\_\_  
\_\_\_\_\_

9. What would be your opinion of a program to train high school juniors or seniors (16-17 years old) as child care workers?

\_\_\_\_\_ There is a need for such a training program in our area

\_\_\_\_\_ I would be interested in employing persons who have received this  
training

\_\_\_\_\_ There is no need for this kind of program in our area

\_\_\_\_\_ I am undecided regarding this kind of program

10. If such a program were developed would you be interested in cooperating in a work-experience plan\*? (This is not a definite commitment on the part of your business, but rather an indication of interest.)

\_\_\_\_\_ yes

\_\_\_\_\_ no

\_\_\_\_\_ undecided

\*Observation and Work Experience

In addition to class and laboratory sessions each student needs opportunities for observation, participation, and on-the-job work experience.

Observation and participation is planned to help students develop an understanding of the world of work and requirements of the job for which he is receiving training.

Work experience is a paid job outside the school, specifically related to the occupation being studied in the school. It is under the supervision of both the employer and teacher of the course.

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Teacher  
 School  
 Date

**LIST OF LOCAL SOURCES OF EMPLOYMENT IN THE FIELD OF  
CHILD CARE SERVICE**

**Purpose:** To provide a list of establishments, organizations, agencies or services in the locality of the school-community (or commuting area) that have employment opportunities in the Child Care Service field.

Name of business, organization, etc.	Address
1.	
2.	
3.	
4.	
5.	
6.	
7.	
*8.	
9.	
10.	

(Business Survey)

SURVEY OF BUSINESSES WHICH EMPLOY PERSONS IN  
FOOD SERVICE OCCUPATIONS

1. Name of firm or individual\_\_\_\_\_

2. Type of business

\_\_\_\_\_Cafeteria

\_\_\_\_\_Restaurant

\_\_\_\_\_Hotel or Motel

\_\_\_\_\_School Lunch

\_\_\_\_\_College Food Service

\_\_\_\_\_Hospitals

\_\_\_\_\_Nursing Homes

\_\_\_\_\_Drug Store

\_\_\_\_\_Variety Store

\_\_\_\_\_Others, (please list)

\_\_\_\_\_  
\_\_\_\_\_

3. Type of food service

\_\_\_\_\_lunch counter

\_\_\_\_\_self-service (smorgosbord)

\_\_\_\_\_table service

\_\_\_\_\_cafeteria

\_\_\_\_\_drive-in

\_\_\_\_\_other

4. How many employees do you have in each of these jobs?

\_\_\_\_\_hostess

\_\_\_\_\_waitress

\_\_\_\_\_curb girl or boy

\_\_\_\_\_cafeteria counter server

\_\_\_\_\_cook

\_\_\_\_\_pastry cook

\_\_\_\_\_vegetable cook

\_\_\_\_\_lunch counter or soda fountain  
waitress

\_\_\_\_\_combination short-order cook-  
waitress

\_\_\_\_\_salad girl

\_\_\_\_\_general cleaner

\_\_\_\_\_dish machine operator

\_\_\_\_\_other

5. What is your work schedule?

\_\_\_\_\_ number of days in work week

\_\_\_\_\_ length of work shift

Hours of work shift

morning shift from \_\_\_\_\_ to \_\_\_\_\_

afternoon shift from \_\_\_\_\_ to \_\_\_\_\_

6. What is the approximate length of service of these employees?

\_\_\_\_\_ a. 1 year or less

\_\_\_\_\_ b. 1 - 5 years

\_\_\_\_\_ c. 5 - 10 years

\_\_\_\_\_ d. 10 years or longer

7. When vacancies do occur how difficult are they to fill?

\_\_\_\_\_ a. easy, many qualified applicants

\_\_\_\_\_ b. several qualified applicants

\_\_\_\_\_ c. commercial employment agencies

\_\_\_\_\_ d. informal contacts

\_\_\_\_\_ e. others, such as \_\_\_\_\_

9. What would be your opinion of a program to train high school juniors or seniors (16-17 years old) for food service work?

\_\_\_\_\_ a. There is a need for such a program in our area

\_\_\_\_\_ b. I would be interested in employing persons who have received such such preparation

\_\_\_\_\_ c. There is no need for this kind of program in our area

\_\_\_\_\_ d. I am undecided regarding this kind of program

10. If such a program were developed would your firm be interested in cooperating in such a work-experience plan\*? (This is not a definite commitment on the part of your firm, but rather an indication of interest.)

\_\_\_\_\_ a. yes

\_\_\_\_\_ b. no

\_\_\_\_\_ c. undecided

\* Observation and Work Experience

In addition to class and laboratory sessions each student needs opportunities for observation, participation, and on-the-job work experience.

Observation and participation is planned to help students develop and understanding of the world of work and requirements of the job for which he is receiving training.

Work experience is a paid job outside the school, specifically related to the occupation being studied in the school. It is under the supervision of both the employer and the teacher of the course.



\_\_\_\_\_  
Teacher  
\_\_\_\_\_  
School  
\_\_\_\_\_  
Date

LIST OF LOCAL SOURCES OF EMPLOYMENT IN THE FIELD OF  
FOOD SERVICES

Purpose: To provide a list of businesses, establishments, organizations, agencies or services in the locality of the school-community (or commuting area) that have employment opportunities in the Food Service Field.

Name of business, organization, etc.	address
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

(Business Survey)

SURVEY OF BUSINESSES WHICH EMPLOY PERSONS  
WITH SEWING SKILLS

1. Name of firm or individual \_\_\_\_\_
2. Type of firm or business (Please check)  

<input type="checkbox"/> Clothing Store	<input type="checkbox"/> Speciality Shop
<input type="checkbox"/> Department Store	<input type="checkbox"/> Interior Decorating Shop
<input type="checkbox"/> Dry Cleaning Establishment	<input type="checkbox"/> Seamstress in own home
<input type="checkbox"/> Laundry	<input type="checkbox"/> Other, (Please list)
<input type="checkbox"/> Tailor Shop	_____
	_____
3. Check the types and give number of jobs which now exist in your firm:  

<input type="checkbox"/> Alteration Specialist for men and women's clothing	<input type="checkbox"/> Home Furnishing-making draperies and slip covers
<input type="checkbox"/> Clothing Repair Specialist	<input type="checkbox"/> Others, (Please list)
	_____
	_____
4. Would you be willing to provide some work experience \*for trainees?  
☐ yes                      ☐ need more information                      ☐ no
5. What would be your opinion of a program to train high school juniors or seniors (16-17 years old) for food service work?  
☐ a. There is a need for such a program in our area  
☐ b. I would be interested in employing persons who have received such preparation  
☐ c. There is no need for this kind of program in our area  
☐ d. I am undecided regarding this kind of program

\*Observation and Work Experience

In addition to class and laboratory sessions each student needs opportunities for observation, participation, and on-the-job work experience.

Observation and participation is planned to help students develop an understanding of the world of work and requirements of the job for which he is receiving training.

Work experience is a paid job outside the school, specifically related to the occupation being studied in the school. It is under the supervision of both the employer and the teacher of the course.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Teacher  
School  
Date

**LIST OF LOCAL SOURCES OF EMPLOYMENT IN THE FIELD  
OF CLOTHING, TEXTILES AND HOME FURNISHINGS SERVICES**

**Purpose:** To provide a list of businesses, establishments, or organization in the locality of the school-community (or commuting area) that have employment opportunities in the Clothing, Textiles, and Home Furnishings field.

Name of business, organization, etc.	Address
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

(For Survey of Homemakers)

A SURVEY OF HOME RELATED OCCUPATIONS

The \_\_\_\_\_ school district is expanding it's home economics program. In addition to maintaining and improving the present program for home-making, it may offer additional courses which prepare youth and adults for employment in jobs which are related to home economics. Your cooperation in surveying the job potential will be greatly appreciated.

Name \_\_\_\_\_

1. Are you a full-time homemaker? \_\_\_\_\_

2. Are you employed outside the home? \_\_\_\_\_

3. Do you employ someone to assist you with homemaking duties? \_\_\_\_\_

Part-time \_\_\_\_\_ Full-time \_\_\_\_\_

What responsibilities does this person assume?

\_\_\_\_\_ General Cleaning

\_\_\_\_\_ Preparing meals

\_\_\_\_\_ Laundering

\_\_\_\_\_ Caring for children

\_\_\_\_\_ Caring for an elderly person

\_\_\_\_\_ Sewing for family

\_\_\_\_\_ Custom sewing (making draperies & Slipcovers)

\_\_\_\_\_ State other types of work done by this person: \_\_\_\_\_

4. If a person were trained as a specialist, place an x in blank beside the job for which you would employ her.

\_\_\_\_\_ Preparing family meals

\_\_\_\_\_ Caring for children

\_\_\_\_\_ Caring for an elderly person

\_\_\_\_\_ General Cleaning

\_\_\_\_\_ Laundering

\_\_\_\_\_ Sewing for the family (repairing, altering, mending and construction of family clothing.)

\_\_\_\_\_ Custom sewing for the home (slipcovers, draperies)

\_\_\_\_\_ Others, not listed \_\_\_\_\_

5. Check the appropriate age group you would prefer to hire for the jobs listed below.

JOBS

AGE GROUPS

Preparing meals

Caring for children

Caring for elderly person

General Cleaning

Laundering

Sewing for family

16-19	20-34	35-45	45-65
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

DEPARTMENT OF EDUCATION  
STATE OF TENNESSEE  
HOME ECONOMICS SERVICE

Date \_\_\_\_\_

1. Name of firm \_\_\_\_\_ Address \_\_\_\_\_
2. Type of business \_\_\_\_\_
3. Person contacted \_\_\_\_\_ Title \_\_\_\_\_
4. What are the opportunities for employment in occupations involving Home Economics knowledge and skills? (Summarize below)

[illegible]

5. What educational qualifications do you require for new employees?  
No Minimum\_\_\_\_\_8th Grade\_\_\_\_\_High School\_\_\_\_\_College\_\_\_\_\_Special Training\_\_\_\_\_
6. Do you require previous work experience for beginning employees? yes\_\_\_No\_\_\_
7. Do you anticipate any increase in employment? Types\_\_\_\_\_
8. Do you have much turn-over of workers? yes\_\_\_\_\_no\_\_\_\_\_
9. Would you be interested in employing persons with special training? yes\_\_\_no\_\_\_
10. Would you be interested in present employees receiving additional training?  
yes\_\_\_\_\_no\_\_\_\_\_
11. Would you be willing for trainees to observe your operation? yes\_\_\_no\_\_\_
12. Would you be willing for an instructor to observe your operation? yes\_\_\_no\_\_\_



13. Would you cooperate with on the job training experience? yes\_\_\_\_no\_\_\_\_

14. Indicate types of training desired\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## APPENDIX B

### JOB ANALYSIS

"The typical vocational-education program in the high school, regardless of its organizational pattern, is designed to achieve certain goals and is organized and scheduled accordingly. Since the purpose of vocational education is to prepare individuals for entry into an occupation, course content is determined by an analysis of what the worker must know and be able to do to be successful in that occupation"<sup>1</sup>. A job analysis then serves as a basis for program planning as it helps a teacher identify the objectives, understandings, skills and abilities to be acquired by the individual to be successful on the job.

An analysis is a cooperative venture. It is made by means of observations, interviews with workers, managers, and supervisors. It may be prepared by a teacher, manager, worker, or by occupational specialists and qualified professional personnel.

In making an analysis the job is first specifically defined. The definition includes the answers to these three questions:<sup>2</sup>

1. What is done?

An analysis of what the worker does identifies the duties, tasks or functions performed by the worker.

2. How is it done?

A description of how a job is done includes the skills and abilities needed by the worker.

3. Why it is done?

An answer to this question identifies the knowledge, understandings, principles, attitudes required for successfully performing the job.

A careful study of a job definition or description will also help determine:

1. The qualifications of enrollees as to

- The minimum educational background necessary for trainees
- the maturity level of enrollees. This is influenced by amount of responsibilities to be carried by the worker, the probability and effect of mistakes which might be made on job in terms of added costs, customer relations, and human development.

1. Ohio State University, Theory into Practice, Vol. III No. 5, p. 174

2. Employment Security Review, "The New Dictionary of Occupational Titles", Feb. 1963, by A. B. Eckerson.

- The aptitude, interests, and temperament needed by workers. This will be helpful in setting up criteria for selection of enrollees.

2. The length of the training course

- the number of weeks or months of training that is necessary for enrollee to learn the job.

3. The equipment needed

## APPENDIX C

### SUGGESTIONS FOR WRITING FOOD SERVICE EQUIPMENT SPECIFICATIONS

William P. Rosselle  
Atlanta, Georgia

#### GENERAL REQUIREMENTS

##### 1 - Scope of the Work

The Equipment specified herein is to be delivered to the job site, with all transportation charges prepaid, uncrated, assembled and erected in position, as shown on plans, ready for mechanical and electrical connections. Each heated, cooled and mechanically operated fixture is to be tested and the operation and care of the equipment is to be demonstrated to the owner. The equipment contractor shall remove all rubbish and debris, caused as a result of work under this contract, and clean up equipment furnished.

##### 2 - Work by Others

Others will provide roughing-in and make connections to the fixtures after they have been erected. Others will provide cut-off valves in steam supply lines, traps in steam return lines, stop cocks in gas supply lines, connected wastes and traps for sinks and fused disconnect switches.

##### 3 - Cooperation with Others

The equipment contractor shall cooperate to the fullest extent with all others concerned with the building and equipment project. Within six weeks of being awarded a contract, the equipment contractor shall furnish complete shop drawings and plans showing the size and location of all outlets required for the fixtures included.

##### 4 - Equipment Requirements

All steam heated fixtures shall have mounted operating valves and shall be furnished equipped to operate at the steam pressure shown in the equipment schedule. Pressure reducing valves shall be furnished with fixtures for operation at a lower pressure. Thermostatic controls are to be provided and be properly mounted on fixtures only as called for in the detailed specifications.

All gas heated fixtures shall have burners, gas cocks and controls that have been approved by the American Gas Association. They shall be for the type of gas furnished to the project.

All electrically heated and motor driven fixtures shall be for the current shown in the equipment schedule and have mounted switches and controls, all wired complete so only one connection will be required for each fixture or complete section of a fixture.

All fixtures to be fabricated special shall be the products of one manufacturer that has the approval of the owner. They shall comply with local and state health board requirements and with Standard No. 2 of the National Sanitation Foundation. They shall not be constructed until after detail drawings have been approved.

#### 5 - Materials and Workmanship

All materials, equipment, etc., shall be new and of the kinds specified and shall be in undamaged condition when turned over to the owner. All workmanship shall be of the best quality by craftsmen skilled in their respective trades.

#### 6 - Standard Fixtures

Various Items are specified herein by Model Number, Brand, Trade Name or name of the manufacturer and it is the intent of this specification that the fixtures, so specified, be furnished. Bids including substitute fixtures will not be considered unless approval, of such fixtures, is secured before bids are taken.

#### 7 - Guarantees, Warranties and Service

The Equipment Contractor shall guarantee each piece of Equipment furnished by him to be of the capacity specified, to operate correctly and that it has been correctly installed and connected. All fixtures shall be guaranteed for a period of one year after acceptance by the Owner. Any complete fixture or parts of fixtures found defective or not operating properly shall be replaced at no cost to the Owner. Improper connections to fixtures and improper operation of fixtures shall void the guarantee, however, it is the responsibility of the Equipment Contractor to submit evidence in writing specifically describing conditions that might relieve him from the terms of this guarantee.

All refrigerating systems shall have a five year warranty and one year service. The service shall be provided by the Equipment Contractor. The warranty shall be provided by the manufacturer of the refrigerating units. The service shall be



complete and include all cost of keeping the refrigerated fixtures in operation for a full year after acceptance by the Owner. The warranties are to cover replacement parts of the refrigerating systems and controls for four years after termination of the service period. Warranties shall not include electrical parts, transportation or labor.

#### 8 - Name Plates

All fixtures shall have small name plates giving the names and address of the manufacturer and the model number or serial number of the fixture. All fixtures with electric motor drive or electric heating units shall have accessible name plates giving full electrical characteristics.

### GENERAL SPECIFICATIONS OF FIXTURES TO BE FABRICATED

#### 1. STAINLESS STEEL

All stainless steel shall be type 302 or 304 with 18% chromium and 8% nickel. Sheets shall be polished to number 4 commercial grind. Tubes shall be number 100 grit grind. All joints shall be electro-welded. Welds shall be by the Heliarc process where practical. Welds shall be ground and polished to the original finish. They shall be free from cracks and be smooth and flush without the use of solder.

#### 2. STAINLESS STEEL TOPS

All stainless steel tops shall be fabricated of 14 gauge stainless steel sheets with all free standing edges rolled down at least 1-3/4" and corners rounded on at least a 3/4" radius, unless otherwise called for in the Detailed Specifications.

Stainless steel tops shall be reinforced on the underside with 12 gauge galvanized steel channels running from front to back and with center bracing where required to hold tops flat and even. The channels shall be welded to the undersides of tops and all legs, bodies, drawers, etc., shall be secured to the channels. There are to be no bolts or rivets extending through work tops.

Stainless steel tops, on pipe leg fixtures, shall be sound deadened by means of three coats of hammertone gray enamel sprayed on the undersides.

#### 3. PIPE LEGS

All pipe legs shall be constructed of 16 gauge stainless steel tubes 1-5/8" outside diameter. Legs shall be braced by means of 16 gauge stainless steel tube rails at least 1 1/4" outside diameter. The rails shall be welded to the

legs 12" above the floor unless otherwise called for in the Detailed Specifications. The rails shall be constructed to form rectangular, "T", "L", or "H" frames and there shall be at least one brace welded to each leg. Legs on tables shall not be over 5'-6" apart. Rails are required on sink legs only where necessary to support lower shelves.

Pipe legs are to have fully enclosed stainless steel top gussets welded to reinforcing frames on table tops and to bottoms of sinks. Each leg is to have a bullet shaped, stainless steel, enclosed bottom, adjustable foot screwed into a collar welded in place on the inside of the leg.

#### 4. LOWER SHELVES

Lower shelves, on pipe leg tables, shall be constructed of 16 gauge stainless steel sheets. They shall be made in loose removable sections resting on the tubular rails. Sides and ends of shelves shall be rolled down over the rails. Ends of shelf sections, that abut each other, shall be turned down 1 1/2" and be flanged in 1/2".

#### 5. ELEVATED SHELVES

All elevated shelves shall be constructed of 16 gauge stainless steel sheets with front edges rolled down 1 1/2". Backs and ends shall be turned up 1 1/2" unless otherwise called for in the detailed specifications. Elevated shelves shall be mounted on stainless steel tube and rod supports or stainless steel end brackets arranged so they will not obstruct working tops.

#### 6. DRAWERS

All drawers shall be 20" x 20" x 5" deep unless otherwise called for in the detailed specifications. The bodies shall be constructed of 18 gauge stainless steel sheets with rounded corners. Drawer fronts shall be 14 gauge stainless steel sheets with recessed stainless steel pulls. All drawers shall be mounted on channel frames with nylon or stainless steel ball bearing rollers and be designed for full opening. They shall be reinforced so that they will support a weight of 150 pounds when fully extended.

#### 7. CABINET BASES

All cabinet bases shall be constructed of 18 gauge stainless steel sheets reinforced with 1 1/2" x 1 1/2" x 1/8" galvanized steel angles. Cabinet base fixtures shall be mounted on 8" high adjustable, enclosed bottom, sanitary type, polished stainless steel feet.

#### 8. SHELVES IN CABINET BASE FIXTURES

All cabinet base fixtures shall have lower shelves constructed of 18 gauge

stainless steel sheets. The backs and ends shall be turned up 1 1/2" and be securely welded or riveted in place. All front edges shall be turned down and be formed over the galvanized steel reinforcing frames of the cabinet.

Intermediate shelves shall be provided only where definitely called for in the detailed specifications. They shall be constructed of 16 gauge stainless steel sheets with backs and ends against bodies turned up 2". They shall be securely welded or riveted in position. Front edges shall be turned down 1 1/2" and flanged back 1".

#### 9. SLIDING DOORS

All sliding doors shall be constructed of 18 gauge stainless steel sheets of double pan construction with 3/4" thick sound deadening fiberglass between the two thicknesses of metal. The doors shall be mounted on ball bearing stainless steel rollers either top or bottom mounted. If top mounted, they shall be designed so that they cannot possibly come off of their tracks regardless of how hard they are slammed shut or open. They can be constructed so it will be necessary to use tools to remove them from cabinets. If bottom mounted, they shall operate in open tracks that cannot become clogged. They shall have recessed stainless steel pulls. There shall be a 12 gauge stainless steel angle clip behind the pull of each outer door which will contact the inner door edge and be a stop so the doors cannot completely overlap.

#### 10. SINKS

All sinks shall be constructed of 14 gauge polished stainless steel sheets with all corners, both vertical and horizontal, rounded on full 1" radii and bottom interior corners full coved. Sink fronts shall be flush and smooth without filler pieces. Front and free standing rims shall be 1 1/2" wide with rounded tops 35" above the floor.

Backs of sinks are to be 3" higher than the rims, be turned back to provide the overall width called for in the detailed specifications and be turned down 1 1/2". There is to be a model No. B-221 T & S deck mixing faucet with 12" swing nozzle mounted on each back rim centered over each single compartment sink and over each partition of each multiple compartment sink.

Each compartment of each sink shall have a chromium plated waste outlet with a strainer and an externally operated lever handle. Wastes shall be depressed in the bottoms of the compartments and the bottoms shall pitch down to the wastes. Overflows shall be provided only where definitely called for in the detailed specifications. Dimensions given in detailed specifications are inside of sink compartments. Depth is from the top of the front rim to the bottom of the compartment. Sinks shall be mounted on stainless steel legs.



## 11. DRAINBOARDS

All drainboards shall be constructed of 14 gauge stainless steel sheets. They shall be made integral with sink bodies or be welded to sinks. Drainboards shall have rolled rims on fronts, free standing ends and backs, the same as specified for rims on the fronts of sinks. Sink and drainboard rims are to be integral or be welded together. Drainboards shall pitch down to sinks. The rims are to be 3" high with all interior corners, both horizontal and vertical, formed integral or rounded and welded.

## 12. INSERT SINKS

Sinks mounted in the tops of fixtures shall be constructed the same as specified for other sinks except they shall be welded to the tops and are not to have back ledges or legs, A Model No. B-222 T & S deck type, chromium plated, mixing faucet with a 6" swing spout shall be mounted on each top to the rear of each insert sink, Faucets shall be centered over single compartment sinks and be over each partition of each multiple compartment sink.

## 13. FIELD MEASUREMENTS

It shall be the responsibility of the equipment contractor to secure his own field measurements and to fabricate the fixtures to properly fit into spaces provided, maintaining planned work spaces between fixtures and passages around fixtures. All fixtures shall be installed free standing with a minimum of 4" between edges of fixtures and walls.

## APPENDIX D

### OUTLINE SPECIFICATIONS FOR FOOD SERVICE EQUIPMENT

#### Use Of This Material

This material is intended as a guide in writing detailed equipment specifications. For each piece of equipment suggestions are given for the type of information that needs to be included in the specifications.

Make and model number may be used in lieu of detailed information when a substitution clause is included. This clause states in effect:

Trade names are used as standards of quality.  
Should a contractor wish to use any other product, he must so state clearly.  
Contractor must state what credit will be allowed for substitution.  
Approval for substitutions must be made prior to bid.

Any variables such as number of oven racks, perforated or solid steamer pans or mixing bowl adapters, need to be specified in addition to make and model number.

"Or equal" should not be used because of the difficulty of proving equality.

#### R A N G E

Dimensions:	_____
Material:	_____
Fuel:	(a) gas_____type_____BTU_____
	(b) Electric_____voltage_____phase_____
Top arrangement:	(a) solid hot top_____
	(b) _____
	(c) _____
Backshelf:	double deck_____17" shelf_____vent flue_____
	single deck_____
Legs:	Stainless Steel
Approval:	NSF_____AGA_____UL_____



## STEAMER

Number of compartments: \_\_\_\_\_  
Capacity: 12" x 20" pans, \_\_\_\_\_" deep.  
Materials: Interior \_\_\_\_\_  
Exterior \_\_\_\_\_  
Doors \_\_\_\_\_  
Construction: \_\_\_\_\_  
Approximate shipping weight: \_\_\_\_\_ lbs.  
Type: (a) gas \_\_\_\_\_ type \_\_\_\_\_ BTU \_\_\_\_\_  
(b) electric \_\_\_\_\_ voltage \_\_\_\_\_ phase \_\_\_\_\_  
(c) direct steam \_\_\_\_\_  
Pans to be furnished: Number \_\_\_\_\_ dimensions \_\_\_\_\_  
material \_\_\_\_\_ gauge \_\_\_\_\_ seamless \_\_\_\_\_  
seamed \_\_\_\_\_ perforated \_\_\_\_\_ solid \_\_\_\_\_  
Shelves: No. \_\_\_\_\_ automatic sliding \_\_\_\_\_ removable \_\_\_\_\_  
Timer: Manual \_\_\_\_\_ automatic \_\_\_\_\_  
Low water cutoff: \_\_\_\_\_  
Steam pressure gauge: \_\_\_\_\_  
Pressure limit control: \_\_\_\_\_  
Approval: NSF \_\_\_\_\_ AGA \_\_\_\_\_ UL \_\_\_\_\_

## STEAM KETTLE

Full capacity in gallons: \_\_\_\_\_  
Dimensions: inside diameter \_\_\_\_\_ outside diameter \_\_\_\_\_  
height \_\_\_\_\_  
Material: Interior \_\_\_\_\_  
Exterior \_\_\_\_\_  
Finish \_\_\_\_\_  
Type: deep \_\_\_\_\_ Shallow \_\_\_\_\_ table \_\_\_\_\_  
floor \_\_\_\_\_ tilting \_\_\_\_\_  
Fuel: (a) gas \_\_\_\_\_ type \_\_\_\_\_ BTU \_\_\_\_\_  
(b) electric \_\_\_\_\_ voltage \_\_\_\_\_ phase \_\_\_\_\_  
(c) direct steam \_\_\_\_\_  
Draw off valve: \_\_\_\_\_  
Cover: \_\_\_\_\_  
Thermostatic Control: \_\_\_\_\_  
Steam pressure gauge: \_\_\_\_\_  
Low water cutoff: \_\_\_\_\_  
Elevated swing spout (for filling): \_\_\_\_\_  
Approval: NSF \_\_\_\_\_ AGA \_\_\_\_\_ UL \_\_\_\_\_

## DISH WASHER

Type: \_\_\_\_\_  
Material: \_\_\_\_\_  
Motor: HP \_\_\_\_\_ voltage \_\_\_\_\_ phase \_\_\_\_\_  
Tank heating equipment: (a) gas \_\_\_\_\_ type \_\_\_\_\_ BTU \_\_\_\_\_  
(b) electric \_\_\_\_\_ voltage \_\_\_\_\_ phase \_\_\_\_\_  
Low water cutoff: \_\_\_\_\_  
Thermostatic control: \_\_\_\_\_  
Direction of operation: right to left \_\_\_\_\_ left to right \_\_\_\_\_  
Racks: number \_\_\_\_\_  
Front panel: \_\_\_\_\_  
Wash and rinse thermometers: \_\_\_\_\_  
Legs: stainless steel \_\_\_\_\_  
Pre-rinse: type \_\_\_\_\_ fresh water \_\_\_\_\_ recirculating \_\_\_\_\_  
Approval: NSF \_\_\_\_\_ AGA \_\_\_\_\_ UL \_\_\_\_\_

## REFRIGERATOR

Capacity: Gross \_\_\_\_\_ Cu.Ft. Net \_\_\_\_\_ Cu.Ft.  
Material: exterior \_\_\_\_\_ sides \_\_\_\_\_  
front \_\_\_\_\_ interior \_\_\_\_\_  
Doors: hardware \_\_\_\_\_ locks \_\_\_\_\_  
Shelves: \_\_\_\_\_ pan slides \_\_\_\_\_  
Unit: Make \_\_\_\_\_ motor \_\_\_\_\_  
electrical characteristics \_\_\_\_\_  
self-contained \_\_\_\_\_ - remote \_\_\_\_\_  
Guarantee: \_\_\_\_\_  
Other connections: \_\_\_\_\_  
Insulation: type \_\_\_\_\_ thickness \_\_\_\_\_  
Structural Description: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## MILK BOX

Type: Door \_\_\_\_\_ Lid \_\_\_\_\_  
Capacity: \_\_\_\_\_ 1/2 pt. cartons; \_\_\_\_\_ 1/2 pt. bottles.  
Exterior dimensions: length \_\_\_\_\_ width \_\_\_\_\_ height \_\_\_\_\_  
material \_\_\_\_\_ Gauge \_\_\_\_\_  
construction \_\_\_\_\_  
Interior: material \_\_\_\_\_ gauge \_\_\_\_\_  
construction \_\_\_\_\_  
Insulation: \_\_\_\_\_  
Refrigeration system: HP \_\_\_\_\_ voltage \_\_\_\_\_ phase \_\_\_\_\_  
Guarantee: \_\_\_\_\_

## F R E E Z E R

Capacity: Gross \_\_\_\_\_ lbs. Net \_\_\_\_\_ lbs.  
Material: exterior \_\_\_\_\_ sides \_\_\_\_\_  
front \_\_\_\_\_ interior \_\_\_\_\_  
Doors: hardware \_\_\_\_\_ locks \_\_\_\_\_  
Shelves: \_\_\_\_\_ pan slides \_\_\_\_\_  
Unit: Make \_\_\_\_\_ motor \_\_\_\_\_  
Electrical characteristics \_\_\_\_\_  
self-contained \_\_\_\_\_ remote \_\_\_\_\_  
Guarantee: \_\_\_\_\_  
Other connections: \_\_\_\_\_  
Insulation: type \_\_\_\_\_ thickness \_\_\_\_\_  
Structural Description: \_\_\_\_\_  
\_\_\_\_\_

## M I X E R

Capacity: \_\_\_\_\_ Qts.  
Material: \_\_\_\_\_  
Motor: HP \_\_\_\_\_ voltage \_\_\_\_\_ phase \_\_\_\_\_  
Type of Drive: \_\_\_\_\_  
Service Available: \_\_\_\_\_  
Standard Equipment:  
Bowls \_\_\_\_\_, tinned. If stainless bowl specified, list under accessory  
equipment.  
Flat Beater \_\_\_\_\_  
Wire Whip \_\_\_\_\_

Accessory Equipment: Bowls: \* Number \_\_\_\_\_ capacity \_\_\_\_\_ material \_\_\_\_\_  
Dough Hook \_\_\_\_\_  
Splash Ring \_\_\_\_\_  
Vegetable Slicer\*\* (with slicer plate, standard)  
Shredder Plate, 5/16".  
Bowl Adapter (must be specified for 30 or 60 qt.  
machine)

## P E E L E R

Motor: HP \_\_\_\_\_ voltage \_\_\_\_\_ phase \_\_\_\_\_  
Drive: Belt \_\_\_\_\_ gear \_\_\_\_\_  
Hopper: material \_\_\_\_\_  
construction \_\_\_\_\_  
Abrasive Disk: \_\_\_\_\_  
Peel Trap: \_\_\_\_\_

\* Desirable to specify one additional bowl.

\*\* If food cutter is anticipated for this operation, do not include vegetable  
slicer attachments.

Water Inlet: Non-siphon \_\_\_\_\_  
Working Capacity: \_\_\_\_\_ lbs.  
Finish: \_\_\_\_\_  
Net Weight: \_\_\_\_\_ lbs.

### FOOD CUTTER

Motor: HP \_\_\_\_\_ voltage \_\_\_\_\_ phase \_\_\_\_\_  
Capacity: \_\_\_\_\_  
Transmission: \_\_\_\_\_  
Finish: \_\_\_\_\_  
Net Weight: \_\_\_\_\_

### BAKERY RACK

Dimensions: length \_\_\_\_\_ width \_\_\_\_\_ height \_\_\_\_\_  
Capacity: \_\_\_\_\_  
Spacing: \_\_\_\_\_  
Material: \_\_\_\_\_  
Construction: \_\_\_\_\_  
Type Casters: \_\_\_\_\_  
Shipping Weight: \_\_\_\_\_

### HALF UNIT RANGE

Dimensions: \_\_\_\_\_  
Material: \_\_\_\_\_  
Fuel: (a) gas \_\_\_\_\_ type \_\_\_\_\_ BTU \_\_\_\_\_  
(b) electric \_\_\_\_\_ voltage \_\_\_\_\_ phase \_\_\_\_\_  
Legs: height \_\_\_\_\_ material \_\_\_\_\_  
Approval: NSF \_\_\_\_\_ AGA \_\_\_\_\_ UL \_\_\_\_\_

### SLICER

Material: \_\_\_\_\_  
Finish: \_\_\_\_\_  
Motor: HP \_\_\_\_\_ voltage \_\_\_\_\_ phase \_\_\_\_\_  
Dimensions: \_\_\_\_\_  
Blade: Material \_\_\_\_\_ size \_\_\_\_\_ type \_\_\_\_\_  
Capacity: \_\_\_\_\_  
Safety Features: \_\_\_\_\_

**Sanitary Features:** Both sides of blade, easily accessible for cleaning. Entire machine can be thoroughly cleaning without the use of tools. Feed-through should be readily removable for cleaning.



## APPENDIX E

### SUGGESTIONS FOR FACILITIES AND EQUIPMENT

#### I. Establish the Needs of the Institution

##### A. Philosophy of the school

##### B. Pre-planning Considerations

1. Space required
2. Projected class enrollment
3. Description of clientele
4. Number to be served
5. Hours of service
6. Types of service
7. Peak load
8. Money available
9. State and local laws

#### II. Facility and Layout

##### A. Facilities

##### 1. Space

- a. Operating
- b. Teaching
  - (1) Extra space for students
  - (2) Demonstration area
- c. Classroom and office
- d. Locker rooms, showers and toilets
- e. Receiving area
- f. Storage rooms
  - (1) Food and supplies
  - (2) Cleaning supplies and equipment
- g. Dining area
- h. Serving area
- i. Trash room

##### 2. Interior finish

- a. Floors---ease of care, sanitation, aesthetic
- b. Walls---ease of care, sanitation, aesthetic
- c. Ceilings---ease of care, sanitation, aesthetic
- d. Lighting---ease of care, sanitation, aesthetic

3. Utilities available
4. Heating and air conditioning or air cooling

## B. Plan layout and floor space

### Layout and floor plan

#### a. Activity areas to be arranged

1. Receiving and storage
2. Meat
3. Vegetables
4. Baking
5. Salads
6. Desserts
7. Beverages
8. Serving
9. Dining
10. Dishwashing (garbage--trash)
11. Pots and Pans

#### b. Principles involved

##### 1. Floor:

A sequence of operation or the movement of materials  
from receiving to final clean up

Used for a guide for section location

##### 2. Equipment relationships

To avoid backtracking loading platform, receiving area,  
storerooms, refrigerators, food preparation, cooking,  
serving and dining area should be laid out so that food  
and supplies flow generally in one direction.

Appliance should be placed near the work area where needed.

#### c. Handling of materials, tools and utensils

##### 1. Store at point of first use

Separate into local storage at individual work centers.

##### 2. Allow for economy of motion

Store according to frequency of use

##### 3. Use space economically

Provide specific sizes

Consider distance between shelves as well as the depth

##### 4. Minimize handling and storage

Trucks, conveyers and mobil storage units reduce handling  
and storage

##### 5. Systematize

Organization of storage aids

6. Use good handling procedures
  - Incorporate safety, sanitation and security
  - Limit loads to be lifted
  - Clear aisles and have good traffic flow
7. Co-ordinate
  - Develop a satisfactory communication system

Determine the space needed for equipment

#### IV. (Space)

There is no set formula for determining space needs therefore this must be determined by your own institution. The following are a few suggestions.

Stokes, John W., Food Service and Institutions, (John W. Stokes and Company) Management Consultants, Watertown Station, Boston 72, Mass)  
William C. Brown Company Publishers, Dubuque, Iowa

	<u>Pages</u>
<u>Cafeteria Dining Space</u> --12 sq. ft./seet	42
<u>Table Service Dining Space</u> --15-18 sq. ft./seat	42
<u>Loading Platform</u> --at least 6' in depth, minimum 60 sq. ft. (6x10) where 300 meals are served daily.	44
<u>Receiving Area</u> --at least 60 to 80 sq. ft. Garbage or Trash Storage. None Given	44
<u>Storage Area</u> --1/2 cu. ft./person served (dry food storage) Steel shelving should be at least 18 inches in depth. W/14 ins. between the upper shelves	44
<u>Supply Storeroom</u> --minimum 40 sq. ft.	44
<u>Refrigeration</u> --Meats and Poultry storage will normally re- quire from 35% to 40% of the total refrigeration capacity.	45
<u>Dairy Box</u> --(Temperature range from 33° to 37° F) 20% to 25% of total refrigeration	47
<u>Fish &amp; Vegetable Box</u> --(40° to 45° F) 20% to 25% total refrigeration.	47
<u>Fish Box</u> --(31° to 40° F) Capacity will depend upon quantities used.	47

Kitchen Area--will depend upon: menu, type of service volume of food prepared and cooked in relation of kitchen space to dining area in terms of percentage ranging from 33 1/3% to 66 2/3%

Pages

47

Ohio's Suggested Space and Equipment for Two-Year Technical Programs in Food Service

Suggested Space and Equipment for 2 year Technical Program in Food Service.

Technical Foods Laboratory--1,440 sq. ft. minimum

Dining Area--960 sq. ft. which will accommodate approximately 40 persons at any time.

Dry Storage of Food Supplies--200 sq. ft. minimum

Student Locker Room (Women)--300 sq. ft.-- 25 students

Student Locker Room (Men)--300 sq. ft.

Related Classroom--900 sq. ft.

Office--100 sq. ft.

Food Service (4th Ed)  
In Institutions,  
West, Bessie Brooks  
Wood, Levelle  
Horgar, Virginia  
John Wiley & Sons, Inc.  
New York

Pages

Square feet/seat

School Lunchroom--9-12

555

Hotel & Club Banquet Rooms--10-11

Commercial Cafeteria--16-18

Industry and University Cafeterias--12-15

Residence Halls--12-15

Restaurants and Hotels--(table service)--14-16

Lunch Counters--18-20

Pages

Main Traffic Aisles--minimum 5 ft.

563

Aisles between equipment and work tables at least 3'

Ovens-- 3 1/2 to 4 ft. in front of ovens

Kettles--where contents of the kettle are emptied--3 1/2 to 4 ft.

Preparation

Pages

Employees--4 linear ft./employee. Feet will increase to a minimum of 6 ft. where as many as 3 or 4 ovens are used for roasting

563

Work Table--used on both sides by different workers 3' 6" Maximum reach over a table 20".

Baking & Salad Employees--4' to permit sufficient area for spreading out materials.

Receiving Area--Platform scales--8'. Outside door 4 or 5 foot single or double door.

567

The Pot and Pan Area--3 compartment sink with drain board

575

Serving Area--20' Counter in the small school lunch. 50' Counter Commercial (trend toward shorter).

Seating Capacity--about 300, about 2 counters

Dining Aisles--4 1/2 to 5 ft. advisable

Also Dukas and Lundbery

How to Operate a Restaurant Ahrens Publishing Company, N.Y. 1962.

III. Equipment

1. Selection

a. Type

- (1) Portable--if possible
- (2) Kind of fuel
- (3) Size--smallest to fit needs



- b. Cost
  - (1) Purchase
  - (2) Operating
  - (3) Maintenance
- c. Safety Standards
- d. Sanitary Standards
- e. Availability of service

## 2. Specifications

- a. General information
  - (1) Must conform to state and local laws
  - (2) Specifications should be all inclusive but as short as possible
  - (3) Include as many of the following as may be applicable to the situation.
    - (a) Material
    - (b) Finish
    - (c) Top arrangement
    - (d) Capacity
    - (e) Dimensions
      - Right to left
      - Front to back
      - Work height
      - Overall height
    - (f) Kind of fuel
    - (g) Motor
      - Horsepower
      - Voltage
      - Phase
    - (h) Services Available
    - (i) Standard equipment accessories
    - (j) Legs
    - (k) Approval of NSF, AGA, VL
  - (4) Request 3 bound books which include
    - (a) Specifications
    - (b) Instructions for operations, care and maintenance
    - (c) Parts list
    - (d) Nearest service agencies
  - (5) Request 10 operating manuals
  - (6) Include at beginning of specifications

### The Scope of Work:

"The equipment specified herein is (or shall be) delivered to the job site with all transportation costs

prepaid, be unpacked, assembled and erected in position, as shown on the plans, ready for mechanical and/or electrical connections. The equipment supplier is to demonstrate the use and care of equipment to the owner."

Quote from Mr. Rossells

b. Specific information

See sample specifications in appendix

## APPENDIX F

### SUGGESTED LIST OF EQUIPMENT

#### A. Laboratory Equipment

##### 1. Cooking Equipment

Range with grill

Broiler

Deep Fat Fryer

Stack ovens--roasting & baking decks

Convection oven

Steamer--2 or 3 compartments

Small steam jacketed kettles (3)

Pot Fillers (Faucet)

Tilting kettles (2)

Toaster

Hood or hoods over the cooking equipment

##### 2. Preparation Equipment

Mixers, portable (2) with standard attachments including dough book.

Stainless steel portable tables for the mixers equipped with lock casters.

Slicer

Ice Maker

Stainless steel tables

Cook's, portable

Baker's, portable, with shell for cannisters

Salad making table with sink

Preparation table

Receiving table

Sink in cook's area with disposer

Sink in vegetable preparation with disposer

Three-compartment sink with drainboards

Dishwasher--tank conveyer belt type with booster heaters

Disposer with pre rinse

Soiled dish table

Clean dish table

Equipment for coffee, tea, milk

Scales

Receiving

Ingredient

Position

Proof box

Cooling racks

3. Storage
  - Refrigerators (reach-in)
  - Milk Storage (if needed)
  - Freezers (reach-in)
  - Shelves for storage room
  - Dollies for crates, etc.
  - Mobile utility truck
  - Dish and pan storage racks (portable)
4. Service
  - Hot food server, portable
  - Cold food server, portable with milk refrigeration
  - Tray rails
  - Sneeze guards
5. Sanitary
  - Garbage can on dolly in each work area
  - Can wash in garbage room
  - Incinerator if permitted
  - Wash basins with foot controls in each work area
  - Water cooler (drinking fountain)
  - Cleaning equipment
  - Exhaust fans
6. Miscellaneous
  - Clock
  - Fire extinguishers
7. Dining
  - Tables
  - Chairs
  - Serving tables, etc.

## B. Teaching Equipment

1. Classroom
  - Chalk board
  - Bulletin board
  - Audio-visual Devices
    - Over-head projector
    - Film strip and movie projectors
    - Screens
    - Closed circuit T. V.
    - Dark shades
  - Reference library

2. Laboratory
  - Demonstration center (portable)
  - Overhead mirror
  - Seating for students
  - Chalk board
  - Bulletin Boards
3. Management Office
  - Desk
  - Chairs
  - File cabinets
  - Book shelves
  - Bulletin board
  - Utility cart on casters
  - Storage (other)



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